Neolithic rock-art in the north of Europe; structures, discourses and agency

Thesis submitted in accordance with the requirements of the University of Liverpool for the degree of Doctor in Philosophy by

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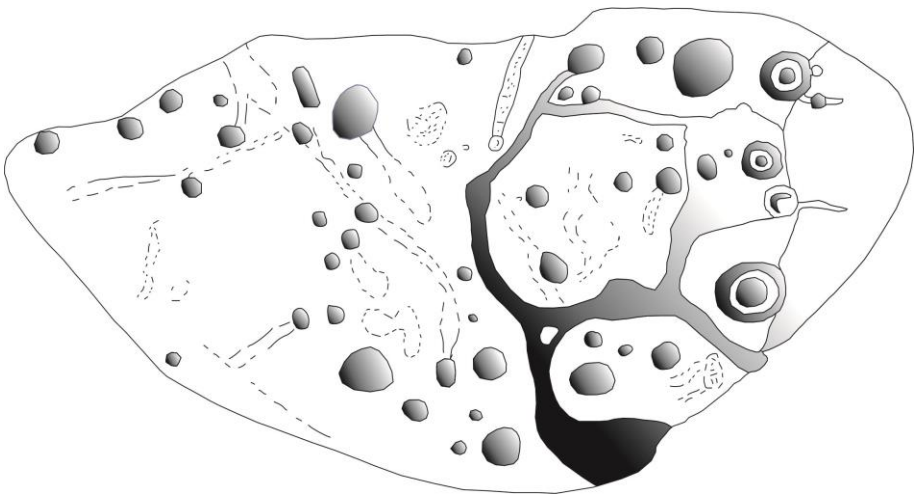
March 2015



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ACKNOWLEDGMENTS

Firstly, I would also like to give a big thank you to Duncan Garrow who has spent far too much time listening to my theoretical, methodological and philosophical musings over the years. Don't worry Duncan, we will never discuss meaning again! Thanks also to Mathew Fitzjohn for his help and support in the final phases. I would also like to thank my Mum and Dad for their support.

Thanks goes to Kalle Sognnes for information about the rock-art around Trondheim and to Jo Mackintosh from Cumbria County Council for providing me with information of Neolithic and EBA sites.

Last, but by no means least, I would like to give a big thank you to Mirjam for all her hard work helping me with all the statistics and proofreading my thesis, it is no exaggeration that I could not have finished it without her help. Hartstikke bedankt!

The Wirral, March 2015

ABSTRACT

Archaeology involves creating meaningful narratives of prehistoric societies, using only the remains of their material culture. This study focuses on Neolithic rock-art in two very different regions – Jämtland (Northern Sweden) and Cumbria (North West England) – seeking to explore, directly, the 'meaningfulness' of this art.

During the Neolithic period in Britain (c. 4000-2400 BC) and Northern Sweden (c. 4000-1800 BC), rocky outcrops were elaborated either by pecking abstract designs (Britain) or by carving and painting animal and human representations (Northern Sweden). Prehistoric rock-art in Britain and Scandinavia is usually understood and made 'meaningful' in relation to one, or a combination of, methodological approaches: it may be understood as part of the landscape (experienced through the human body (phenomenology)), or given meaning in light of ethnographic evidence. All of these approaches, however, ignore the subtle ways in which the rock-art itself was structured.

The study, presented here, employed three methodological approaches in order to attempt to understand rock-art in a new and, arguably, more meaningful way. Firstly, a structure- based approach involved establishing the primary methods that the carvers used to create meaningful rock-art narratives. Secondly, a discourse- based approach was used to uncover how these basic design forms were articulated, to allow communication and dialogue of Neolithic ideas into the sphere of social practice (discourse being an attempt to identify themes within the rock-art narratives, which act as intermediaries between structure and agency). Finally, the third agency- based approach blends structure with discourse (agency allowed meaningful social action to occur during the Neolithic).

The structure-*based* approach in Cumbria revealed that the art of the central fells region was based on the manipulation of natural and cultural cups or circles into linear patterns. This is in contrast with the approach in eastern Cumbria, where the reverse was found- with lines being manipulated into circular shapes. In Jämtland, the fundamental structure of the art was based on the division of elk into both male/female and moving/stationary categories. The results of the discourse methodology revealed that three themes dictated the style of rock-art carvings during the Neolithic, in both Cumbria and Jämtland; naturalistic, stylised and abstract. The agency approach concluded that the visual statements made using the rock-art were examples of agents' changing relationship with the natural world and the resources it contained- especially the quarrying of stone for axes. Metaphorically, it is argued that the three changing discourses of rock-art were a reflection of the changing relationship people had with the quarrying of stone and its exchange.

One of the main implications of this research is the finding that there is still a place for investigating rock-art and material/visual culture. Furthermore, using the methodological approach of this research, we are in a position to explore some of the deeper dimensions of visual culture, and its relationship to social structure and agency, in the Neolithic.

CHAPTER ONE

The rock-art of Northern Europe in earlier prehistory

1.0 Introduction

Rock-art is, perhaps, the most visual aspect of the Neolithic- and it is easy to become enchanted by these enigmatic artistic expressions from earlier prehistory. The often dramatic locations, have inspired many landscape and phenomenological discourses- whilst rock-art's visual impact often leads to its recording by hand or, more recently, digitally. However, it is easy to forget that rock-art had a social function as well. This thesis will attempt to explore the social aspects of Neolithic rock-art in Northern Europe, by developing an integrated prehistoric social theory, which will investigate how the art expressed social structure, helped to create social discourses about Neolithic society, and directed Neolithic agency. This will be in contrast to some recent approaches, which have tended to objectify, aestheticise, and remove rock-art from its social context (see sections 2.1.3 and 2.2.5 to 2.2.11).

This research will attempt to redefine the way rock-art is looked at, by exploring different ways of thinking about art in prehistory- from a more sociological perspective. Overwhelmingly, rock-art researchers are recorders- making images that allow the art to be enjoyed outside its social and landscape context. Currently, the recording of rock-art has seen a digital renaissance, and along with the introduction of Internet databases, the art has never been better recorded or available. Whilst these advances in themselves are positive, such developments have led to a move towards an aesthetics- based understanding of prehistoric rock-art. This may be seen as part of a wider technological alienation, inherent within what may be termed, 'post-archaeology'. This will be discussed in section 3.1.

To counter the drift towards the technologically based visual, superficial and exterior post-archaeological narrative of the 21st century, a methodological approach is needed; one which can explore prehistoric art's role, within a social context- but, at the same time, draw upon digital recording advances (both in terms of the art itself and its wider landscape.) The issue, here, is whether a deeper dimension, and meaning, to rock-art (as an art-object or icon, to use Gell's (1998) terminology), can be found. Currently, most researchers' response, to the art, involves either recording it, exploring it through phenomenology, or within a wider landscape. But unfortunately, social theory- and its concern with power, conflict and inequality- is, largely, missing. Therefore, if rock-art studies and wider archaeology hopes to avoid sliding towards a technologically based aesthetics-the sole purpose of which seems to be to erase conflict and inequality from the archaeological record-a new methodology will have to be created, which can integrate (rather than alienate) technological advances, back into social theory.

Thus, the first task is to decentre the concept of rock-art, to encourage a more critical awareness of its role in the Neolithic. This research will attempt to ask a number of research questions, all of which are specifically important for drawing social theories of art back into the prehistoric narrative:

(1) Can the structure behind, and ultimately the meaning of, rock-art be located?

(2) What role did discourse play in Neolithic society?

(3) What is the relationship between rock-art and agency in the Neolithic?

All of these questions serve to move current discourses, about rock-art, away from the superficial, towards an understanding that requires a deeper reflection on Neolithic social practices.

1.1 Structure of research

How rock-art was structured and how it, in turn, structured (through agency) Neolithic society, is a difficult question for modern researchers to answer. However, in order for an understanding of meaning and social structure in the Neolithic to be found, structure needs to be placed in its rightful position, *vis-à-vis* agency and discourse. To do this, there needs to be a systematic analysis of the rock-art, which can examine what are suggested, here, to be the three most important aspects of social theory; structure, discourse and agency. Beginning in chapter two, the history of rock-art research in the two regions, Cumbria, England and Jämtland, Sweden, will be explored.

Chapter three will explore some of the complex theoretical and methodological issues that have emerged from the history of rock-art research. It is suggested that wider archaeological research lies at a crossroads, in relation to locating prehistoric structure and agency-as does rock-art's place within the wider archaeological narrative. Generally speaking, processual accounts of prehistory tended to focus on closed circuit structures, at the expense of agency. Post-processual archaeology from the 1970s, however, placed a greater emphasis on discourse and the discursive nature of material culture, without rejecting the idea that the archaeological record may have some inherent structure and, by extension, meaning. However, contemporary or, what may be termed 'post-archaeology', has a tendency towards focusing more and more upon agency and historicism, at the expense of structure and discourse, when explaining social action-thus weakening social theory's place within prehistoric research. This has led to a number of theoretical problems, which will be explored in Chapter 3. However, it must be remembered that such agency centred and historically driven archaeology (which has, to a lesser or greater extent, taken over from social archaeology) occupies only a fraction of the contemporary, post-archaeological landscape -with its technological dominance, based on scientific objectivism. It is suggested that if the drift of post-archaeology towards ever-greater

objectivism and aestheticism is to be avoided, an attempt to resolve the structure/agency debate in archaeology needs to be found. Through the use of discourse in the research analysis developed here, structure can be integrated with agency-, which can build a solid foundation from which objectivism and aestheticism can be attacked. Discourse (although more common in the context of the social sciences) can still be a useful tool within a prehistoric archaeology- since discourse can act as a methodological bridge between social structures, human agency, and their expression through the rock-art. It is suggested that rock-art was a special kind of visual discourse concerning Neolithic life.

In Chapters four and six, part one of the Cumbrian and the Jämtland research will begin by exploring the first of the major research themes of this thesis; the structures and meanings behind the creation of rock-art. The hypothesis is that rock-art in Cumbria and Jämtland was organised according to an underlying set of rules, which created a design grammar. The basis of this design grammar is letters (the individual motifs) that were formed into words (how such motifs are formed and joined together). Therefore, by reducing the rock-art to its basis, it is hoped to show that the production of the art (as a process of enculturation and socialisation) was systematic and purposefully structured. The purpose of this is that, before any research into prehistoric agency can be undertaken, the social structures, which were expressed through the art, need to be located.

Following on in Chapters Five and Seven, the second major research theme, of this thesis, will explore the discourses that the rock-art helped to create. Having identified structure (the underlying letters and words of Cumbria and Jämtlandic rock-art) the next stage is to identify the discourses that the rock-art served to create in the Neolithic. Discourse was, and still is, a means through which social structures or systems are played out; the goal of which is to have an effect, ultimately, upon human agency. Furthermore, it is through discourse, that agency goes on to create, shape and influence social structures. Discourses are the link that allows

structure and agency to interact- backwards and forwards- one affecting the other. By viewing rock-art as text and discourse, there is an attempt to 'bridge' the gap (methodologically speaking) between structure and agency. Since discourses often create and reinforce power relationships (by giving legitimacy through connecting social action to the rules or structuring principles which made such acts meaningful in the first place) discourses, and the text that they helped create, are of central importance to this research.

Finally, Chapter Eight will begin to look at the final research aim; how rock-art affected human agency. This will be achieved in both regions, by grounding rock-art into the Neolithic stone axe/knife production, and exchange networks, which existed in the regions at the time the art was created. One of the main post-structuralist criticisms- against seeing human action through the lens of social structures- is that it tends to ignore the role of the individual. Furthermore, social structures are often too abstract to be truly meaningful. As a result, agency, and the individual, has become a more important research aim in contemporary archaeology. However, rather than viewing agency and the individual as an isolated issue, agency, in the Neolithic, will be explored in relation to structures and discourses. Before any attempt of the above can be made, it is necessary to become familiar with the two regions of research-the form and date of the rock-art, the media upon which it was created, why a comparison was chosen and, finally, an outline of the research methods to be used.

1.2 Regions

Britain is home to a wide variety of geographical and topographical regions. Figure 1.1 demonstrates that, geographically, the country may be split along a line running from the River Tees (near Hartlepool in North East England), to the River Exe in Devon (Nagle 2000). South and east of this line, the landscape is typically low lying and composed of sedimentary rock, with an agriculturally rich landscape. To the north and west, the terrain is generally hilly or mountainous (away from the coast) with underlying igneous and metamorphic bedrock. Wetter

maritime weather dominates the northern and western regions, with lower mean average temperature and higher precipitation than in the south and east. Therefore, all of Scotland, a good proportion of Northern England, the whole of Wales, and parts of the West Country, lie in a region, which is, climatically, topographically and geographically different from Southern and Eastern England- along with the near continent.

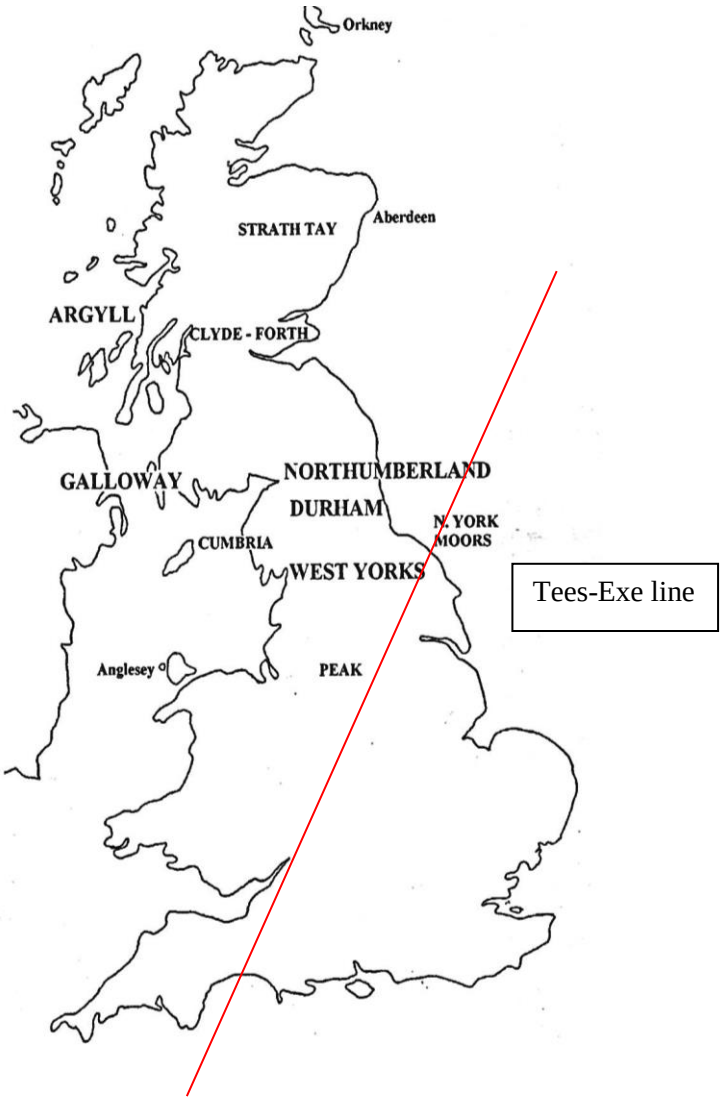


Figure 1.1 British art and the Tees-Exe line (Beckensall 2002, Figure 3).

British rock-art from the Neolithic and Early Bronze age (hereafter, EBA) is almost exclusively found in northern and western regions of -above the Tees-Exe line- with concentrations to be found in the major upland regions of Northern England -such as the Pennines, (Beckensall

1983; 1986; 1994; 2001; 2002; Beckensall & Laurie 1998; Bradley 1997; Burgess 1990; Hewitt *et al.* 1996; Morris 1989; Van Hoek 1982), North York Moors (Vyner 2007), Cumbria (Beckensall 2002; Sharpe 2007a;), Co. Durham, and Northumberland (Beckensall 2001; Mazel 2003; 2005; Waddington 1995; 1996; 1999; Sharp 2007b; Waddington & Passmore 2004; Van Hoek 1988; 1989).

In Scotland, rock-art is found in Galloway, Argyll, the Clyde-Forth gap, Tayside, Aberdeen and in the Northern Isles (Bradley *et al.* 2001; Jones 2006; Jones *et al.* 2011). Rock-art is generally located in upland regions, away from lower lying settlement areas, where light soils (poor for agriculture) sustain only minimal biodiversity. It can not be definitively stated that this would have been the case in the Neolithic, since temperatures would have been a little higher during this period- and the upland peat growth, which covers most of the upland regions today, would have been absent. A determining feature of rock-art's location is that it is only found in British and Irish regions that contain suitable rocky outcrops and surfaces. Thus, most of Southern and Eastern Britain is excluded from the open-air rock-art tradition, as it lacks the suitable geology for this type of art. However, it does not lack monuments that are still mostly devoid of rock-art, unlike those found to the north and west of the British Isles and Ireland.

Across the North Sea, the Scandinavia Peninsular-comprising Norway and Sweden- is also characterised by a variety of topographic and climatic landscapes. Mountains dominate Western and Northern Norway, along the border with Sweden-whilst low lying, dense forests interspersed by lakes and rivers, are found in Central and Northern Sweden. Southern regions of Norway and Sweden are agricultural regions, with a milder climate than the North West. Scandinavia may be generalised as comprising of a mountainous, wetter maritime north and west- whilst lakes and boreal forest dominate the north and east. The south comprises pasture/agricultural land and is topographically, economically and historically closer to

continental Europe, than the more northern regions. Thus, in some sense, the Scandinavian Peninsula and the Britain share topographical, climatic and geographical characteristics.

However, Scandinavian rock-art differs from Britain in that more rock-art is found in the south than north. Rock-art, in this region, can be found across the peninsular in a variety of different landscapes, with often large variations in styles- depending on whether the rock-art is located in the agricultural south or the boreal north. The various styles are often seen in relation to differing historical and economical activities. Generally speaking, the rock-art is divided into two main styles, shown in Figure 1.2; (a) Neolithic or hunter's rock-art and (b) Bronze Age farmer's rock art (Chippendale & Taçon 1998; Gjerde 2010; Helskog 1994; Hesjedal 1994; Sognnes 1992; 1994; 1995; 2001; 2003).

Figure 1.2 Scandinavia shaded areas associated with ST Bronze-Age occupation that corresponds roughly with the distribution of ST rock-art. Triangles show locations of NT cultural artefacts, whilst the un-shaded areas are hunter-gatherer zones. (Bakka 1976, Figure 1).

Recently, the more neutral terms ‘northern’ and ‘southern’ tradition (hereafter, NT and ST) have become more popular when describing the different styles of Scandinavian rock-art. Rock-carvings (both northern and southern) are found in their greatest concentrations in Norway and Sweden, with a small number of isolated carvings on boulders in Denmark. A northern tradition of rock-art is found to the east, in Finland and Russia. NT rock-art of Central and Northern Norway is located along the fjords of the western coast- with its greatest concentration in the Trødelag region. In Sweden, the northern tradition is found in the southern part of the region known as Norrland. It is located on, or around, the major river systems of Northern Sweden-some of which rise in Trødelag, on the Norwegian border, and flow through Sweden, into the Baltic.

The earlier northern tradition has a longer historical development- beginning with the large naturalistic motifs of the Mesolithic, with styles further developed during the Neolithic funnel beaker phase (hereafter, TRB) 4300-2800 cal. BC *(swe. Trattbägarkulturen)* and Pitted Ware culture (hereafter PWC) (*swe. Gropkeramiska kulturen*) 3200-2300 cal. BC. However, NT art is mostly thought to be the work of northern hunter groups belonging to, what has been termed, the Slate Culture (which is known to have interacted with Neolithic cultures along the Baltic coast and inland across a natural agricultural frontier, along which Jämtland lies). The later PWC is interesting (from a British Neolithic perspective), since it made polished stone axes and pottery- but was economically a hunter-gatherer society- whilst there is more evidence that the earlier and overlapping TRB is more Neolithic (economically speaking). Finally, the largest concentration of southern rock-art is found in South West Sweden and Southern Norway, and is thought to be linked to Late Neolithic/Early Bronze Age agro-pastoralist cultures- with connections to larger continental Europe’s archaeological horizons, such as the Corded Ware cultures (*swe. Snörkeramisk kultur*) (Berlilsson 1987; Prescott 2001; Kriiska 2003), and its northern extension the Battle Axe culture (*Stridsyxekulturen*) (Eriksson 2008; Mandt 1983).

1.3 Form

British rock-art is known for its abstract, and often repetitive, use of single design elements shown in Figure 1.3- and lacks comparable animal representations to Northern Scandinavia, during the Mesolithic and Neolithic. Firstly, cups are, by far, the most common element in Britain (Bahn 1998; McDonald & Veth 2012; Whitley 2001) -with cups at the centre of curved grooves and cups with grooves running from them. Other more complex patterns are rings, penannulars and arcs, keyhole patterns, grooves enclosing multiple cups, and simple grooves on their own (Beckensall 2002). Spiral motifs are more common in the west of the British Isles, Ireland, Western France and Iberia. Cumbria is one of the Western British regions to have such motifs (Beckensall 2002; Bradley 1997; Sharpe 2007a; 2007b), which are usually associated with Neolithic monuments. This is an important division between, what may be termed, cup-based, and line-based art. This was a very important division in Cumbria, and will be further explored in the later chapters.

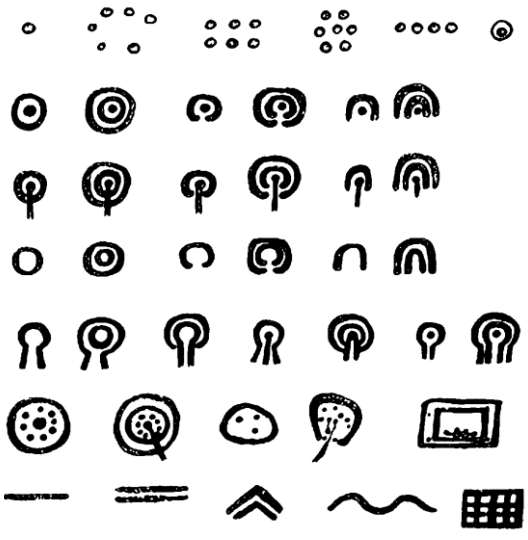


Figure 1.3 Major design types in Britain (Beckensall 2006, Figure 1).

In Norway and Sweden, the content of the two categories of rock-art are distinct, with the NT rock-art in Figure 1.4 dominated by larger animal species; reindeer, elk, deer, whales, halibut and also boats, human figures, some scenes of hunting, fishing and geometric patterns which

may have been a later development within the Northern Tradition (Gjessing 1936; Hagen 1990; Hallström 1960). The ST is dominated by boats, human figures- sometimes associated with identifiable weaponry- scenes of ploughing, wheeled vehicles, hands, foot soles, feet, discs, circles, animals, cup marks and net like figures (Bertilsson 1987). The stylistic form of both traditions is often quite distinct; however the presence of both NT and ST on some panels indicates that they may not exclusively be associated with either NT or ST, and that the same rock-art sites were probably reused over time. This is certainly the case in more northerly Scandinavian regions. In the later chapters it will be shown how style is often overlooked in rock-art research and can often be as important as the art's external form.

Figure 1.4 Rock-art at Glösa, Jämtland. (Retrieved from http://upload.wikimedia.org/wikipedia/commons/7/74/H%C3%A4llristning_fr%C3%A5n_Gl%C3%B6sa_i_J%C3%A4mtland.jpg [Accessed 20th July 2014].

1.4 Date

Rock-art is difficult to date. Generally, the two main ways prehistoric rock-art is dated is from datable material found surrounding the rock-art sites themselves, or associating motifs with

dateable material culture- such as sword or axe heads. In Britain, it is generally believed that rock-art is Neolithic (4000-2400 BC) with some continuation of use and possibly creation into the EBA (however, by the EBA, the tradition of making rock-art was certainly dying out). Thus, even if it was still made and incorporated into period cairns or cists, the concept of rock-art should be regarded as being, in essence, a Neolithic phenomenon. Bradley believes that the 'abstract motifs in British rock-art might have been used over a considerably longer period than their equivalents in megalithic tombs' (Bradley 1997, 66). Thus, according to Bradley, open-air rock-art seems to have had a long period of creation, and to have 'originated as early as 3300 BC and remained important into the early years of the second millennium BC' (1997, 66).

In Northern Britain, the open air rock-art dates from around 3000 to 2000 BC (Bradley 2007, 97), which would place the main carving period as Late Neolithic to EBA. Further west, Passage grave rock-art is thought to be older-dating to the fourth millennium BC (Bradley 1997; 2007; Jackson 1995; MacWhite 1946; O'Kelly 1982; Tilley 2008). Given that recent evidence suggests that the Neolithic may have spread along the western seaways (Garrow & Sturt 2011), it is unsurprising that the idea of making art on stone may have spread up along the Atlantic sea board as well. Whittle *et.al's* (2011) recent analysis, however, suggests that the development of the Neolithic, in the British Isles and Ireland, seems to support a more traditional south east to north west spread from the Near Continent. Either way, when rock-art arrives in places like Cumbria, it was probably created closer to the Early/Middle Neolithic interface of 3300 BC.

Moving further east in Northern England, rock-art found in ritual or isolated contexts may have been quarried or used in the construction of Bronze Age monuments, from earlier open-air Neolithic sites. Vyner (2007) however, suggests that cup mark stones may still have been made in the Bronze Age and deposited as artefacts within the burials of individuals on the North

York Moors. Furthermore, at Eston Nab in Cleveland, cup marked boulders were used in the construction of a palisaded enclosure and a later hill fort (Vyner 1988). Rock-art can also be found on isolated stones which do not form part of any monument-and these may have been carved specifically as isolated, portable artefacts- or they may have been quarried from rock-art found originally in open-air contexts. Thus, a basic division of rock-art contexts are as follows; monumental, open air and portable (although it remains unclear if these three contexts can be connected to a specific historical or chronological phase).

Bradley states that Atlantic rock-art first appeared by the late fourth millennium BC, as a monumental tradition out of the west. It ran in parallel with the development of megalithic art in Ireland, with which it shares a range of circular motifs. Nowhere does the Atlantic rock-art tradition seem to have survived into the first millennium BC (Bradley 1997, 67). Jones *et al.* (2011) has attempted to clarify rock-art dating- using the site at Kilmartin- and suggests a number of different dates ranging from 2900-2800 to 2500-2300 cal. BC (Jones *et al.* 2011, 261). Thus, the art had a long chronology with the possibility of an evolution in form and style. It is very difficult to try and link changes in rock-art styles to a chronological sequence. This is also the situation in Scandinavia as well.

The Northern Scandinavian tradition is thought to have begun around 8000 BC (Gjerde 2010; Goldhahn 2008; Hesjedal 1994; Sognnes 1998; Walderhaug 1999). Tilley (1991) suggests that the majority of Northern Scandinavian rock-art dates to a period between 3500-2000 BC. Thus, most northern rock-art in Sweden is during the Late Stone Age, with earlier art being made in during the Mesolithic period in Norway. Most authors agree that there is an overlap along an agricultural frontier in Central Scandinavia, which is thought to have been around 2500 BC- during the main period of rock-art creation. In Scandinavia, there is also a third way of dating rock-art; Holocene isostatic land uplift (Eronen *et al.* 2007; Sognnes 2001; 2003) whereby the

height rock-art panels are above sea level can help determine their date (Hafsten 1983; Nimura 2010; Sognnes 2003).

1.5 Comparison

Any comparative study requires a justification as to why a comparison needs to be made in the first place. The first reason is that the theoretical and methodological basis of the thesis demands that two variables are required in order to make a comparison. The second is that both Cumbria and Jämtland (at a regional scale) and Scandinavia (as a whole) have similar geographies to Britain, with a wetter more mountainous north and west, and a warmer, dry and flatter south and east- closer to the continent. Thirdly, the two regions were sources of stone/slate in the Neolithic period- both of which were widely exchanged. The aim of most comparative studies is a desire to move beyond the narrow boundaries of isolated regional studies; despite differences in external form (shown in Figure 1.5), social processes in prehistory often transcended the narrow confines of regionalism. Here, it is hoped, a broader and more generalised social narrative, can answer some deeper questions concerning; (a) structure and meaning, (b) methodology (c) power and discourse and (d) agency. Regional studies can achieve this, but they generally lack the scope and depth that a comparative study can give.

Moreover, both these regions share a common feature in that they have been considered less appealing regions, in terms of the quality and quantity of the rock-art that they contain. The two study regions both border areas that have more complex and better-researched rock-art. Cumbria is often overlooked in favour of the more numerous and complex rock-art sites in Northumberland, whilst Jämtland/Härjedalen is between the complex and copious Swedish rock-art site of Nämsforsen, Ångermanland and the Norwegian Trødelag area. However, both Jämtland and Cumbria are important, since they are both regions that show a number of external influences, and thus a greater diversity of rock-art styles.

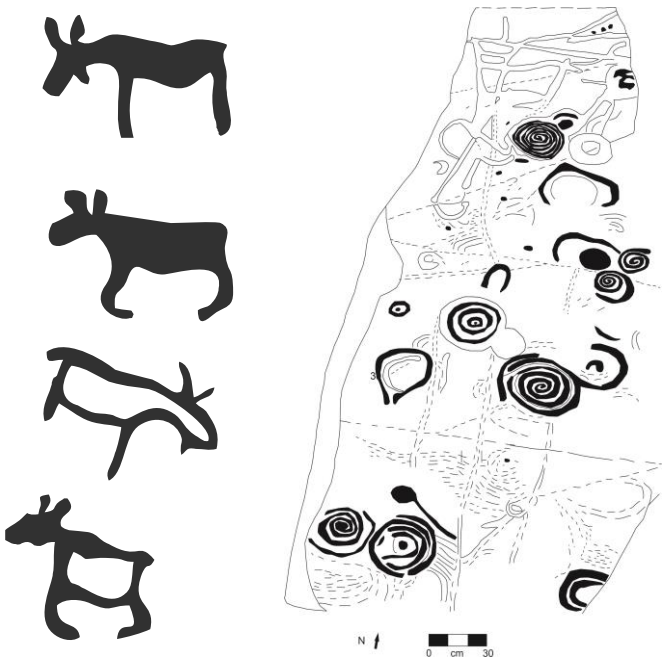


Figure 1.5 Contrast and comparison between the naturalism of Swedish rock-art and the abstract British material (after Sjöstrand 2010, Figure 10.1 and Beckensall 2002, Figure 10).

Finally, a comparison between the two regions can help uncover some of the processes behind the Mesolithic/Neolithic transition, the use of rock-art during the Neolithic transition, and also the Neolithic/EBA transition in Northern Europe. The issue surrounding meaning/social structure, methodology, discourse, and agency serves to help us understand the wider problems surrounding social change, over large periods of time, in earlier prehistory.

Both regions seem to have had a shorter Neolithic period than other, more agriculturally suitable, regions- and, as such, make understanding the Neolithic difficult. Cumbria and Jämtland typically had a longer Mesolithic, in terms of material culture-before the arrival of the EBA. In fact, the whole notion of a Neolithic (in terms of agriculture), in these areas of Britain and Scandinavia, has been called into question by Prescott (1996) and Evans (2004). Furthermore, Bradley notes that the adaption of a fully agricultural economy, signals the end of rock-art production in Atlantic Europe-and the creation of a new southern style in

Scandinavia. Therefore, rock-art seems to be linked to those regions where the transition to the Neolithic/EBA occurred only after a longer Mesolithic period.

1.6 Research aims

One of the main impetuses for this research is to move the art away from simply becoming a bland, objectified, and aestheticised prehistoric resource-devoid of its landscape and social context. This seems to be the logical conclusion if more and more technological advances are made in rock-art recording-whilst at the same time less and less effort is being directed towards its interpretation. The goal here is a reappraisal of the art as meaningful, and constructed according to rules that reflected Neolithic social life. Thus if some kind of socially constructed meaning is to be identified, what is needed is an investigation of social structure. However, when this was initially attempted, using a pure structuralist methodology-the conclusions were often very abstract and could tell us little about social processes, as they occurred *through time*. On the other hand, phenomenological approaches to rock-art and archaeology, have attempted to create a discourse centred in the human body. This has gone some way to overcome the dryness of structuralism, but tells us little of the art and more about the human experience of it. Pure agency based approaches tend to see things too functionally and practically, and often downplay the conflicted nature of social relations in prehistory, when explaining social change. Thus, it is desirable to create a method towards understanding rock-art that combines the best aspects of all these approaches, whilst rejecting the negatives.

Finally, rock-art research has often relied heavily upon geography and landscapes, as archaeologists have often turned to such methods when trying to understand this art form (Arsenault 2004; Bradley 1991; 1993; 1994; 1997; 2000; Beckensall 2002; 2006; Fairén 2004; Flood 2004; Helskog 1999; Lahelma 2005; Nash & Chippindale 2002; Ouzman 1998; Ross 2001; Sharpe 2007a; Sharpe 2007b). To a lesser extent, ethnography has often played a similar role in Scandinavia as landscapes have in Britain. Whilst undoubtedly they are important, this

research will attempt to move away from landscape or ethnographic analogy as much as possible, since, although such approaches may help frame social questions, they cannot help in answering them.

Therefore this approach is not a return to rock-art or wider material culture *as* text, but as a metaphor *of* text; rock-art is capable of creating dialogues, which are not reliant upon landscapes, geography or ethnography. Further, the textual metaphor can help us overcome the banality of an increasingly objectified, scientific, and ultimately leading towards aesthetic, post-archaeology-, which rejects all social questions. Metaphorically, rock-art, as text, is capable of entering into dialogical relationships between various rock-art texts, both within regions and beyond.

As a result, by viewing rock-art as text or, more accurately, by textualising rock-art, -marginalised Neolithic groups in Cumbria and Jämtland can be given a voice (through the text). Furthermore, we can link this idea to deconstructing the Neolithic by placing such marginalised regions as Cumbria and Jämtland into the centre. Thus, the first stage of this process will be carried out in chapters four and six, which will attempt to locate meaning through structure. This is an attempt to show the rules (or design grammar) that constructed the texts. The next stage, in Chapters Five and Seven, is to show how the meaningfully structured texts gave the potential for discourse themes to emerge. If identifying the basic structures of the rock-art is the purpose of the first stage, then showing how these structures allow and give rise to discourses, is the purpose of the second stage. What such discourses may have been, and how they helped not only create and sustain, but also change Neolithic society, will be shown.

Finally, if discourse was built upon structure, then agency (Chapter Eight) is built upon discourse. Agency has become a more important research agenda since the general rejection of conventional/normative meanings and structure in the archaeological record, and a move away from issues concerning social theory in prehistory- (Barrett 1994; 2001; Bell 1992; 2001; Brück

1999; 2001; Dobres and Robb 2000; Edwards and Pope 2012; Pope 2007 Tarlow 1999; Van Dyke and Alcock 2003) -and has followed general trends in other areas of the humanities (Callinicos 2004; Gardiner 2002). Here, the role of agency will be considered in relation to discourse (stage 2) and structure (stage 1). The emphasis will be to show the multi-directionality between the three concepts; structure, discourse and agency shown in Figure 1.6.

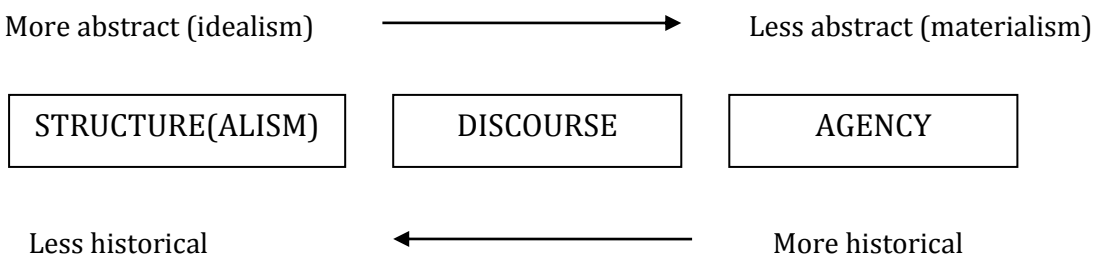


Figure 1.6 Multi-directionality of structure, discourse and agency in relation to history and abstractness.

Chapter two will deal with the history of rock-art interpretations and approaches in both Scandinavia and Britain. Chapter three will outline the basis and theory behind the methodology, which will be applied to the Cumbrian material in Chapters Four and Five. Chapters Six and Seven will then deal with the rock-art from Jämtland, and one site in Härjedalen close to Norway. Finally, Chapter Eight will draw the research findings from both regions together, and offer a comparative overview, to show how rock-art was used as one part of changing relationships with the landscape, material culture and other people.

CHAPTER TWO

A social history of Northern European rock-art

2.0 Introduction

A social history of Northern European rock-art will attempt to assess those narratives which place rock-art within a social context, rather than rock-art research that involves objectifying, recording, cataloguing, and generally aestheticising the art. Rock-art research in Scandinavia and Britain has generally followed the main historical trends in archaeology- with some exceptions. The extent to which rock-art was integrated into the broader archaeological picture has, however, varied. At its broadest scale, it may be generalised that rock-art was well integrated during archaeology's earliest history, in the nineteenth century and between the 1980s and 1990s. Between 1900 and 1970, rock-art was gradually marginalised- and practically abandoned- during the processual era. This was due to a lack of focus on meaning, ritual, symbolism and social theory. This chapter will be divided into two main sections, dealing first with Britain, and then with Scandinavia. In the first section (2.1) the history of British rock-art research will be assessed. Since there is far less research before 1980, a chronological approach will firstly divide this section into pre-twentieth century and 1900-1980. From 1980 onwards, the issues will then be dealt with thematically: (a) neuroscientific, (b) landscape, (c) complexity, (d) field work and (e) reuse of rock-art. The second section (2.2) will outline the general history of rock-art interpretation in Northern Scandinavia up to the present. The second part of the Scandinavian section will thematically deal with some of the key interpretative framework. The final section (3.0) will discuss some of the broader similarities and differences in Northern European rock-art studies.

2.1 History of British rock-art research

2.1.1 Origins of British rock-art analysis: Pre-twentieth century

Cumbrian rock-art has the honour of being the first British prehistoric rock-art to enter written history, when Major Hayman Rooke reported, in a letter to the Society of Antiquaries of London in December 1789, that a number of rock carvings had been found in Aspatria, Cumbria (Hutchinson 1794, 287-288). In the 1820s, J.C. Langlands discovered a 'defaced figure incised on a rude sandstone block, near to the great camp on Old Berwick Hill' (Beckensall 1999, 31). These two examples aside, interest in British rock-art only intensified from the 1850s onwards. From this time, until the end of the Victorian period, the number of investigations into the prehistoric rock-art of Northern England and Scotland increased significantly. Such figures as Ferguson (1881; 1890; 1898) Greenwell (1852; 1858; 1863; 1865), Tate (1865), Taylor (1883), and in Scotland, Simpson (1864a; 1864b; 1866; 1874), were amongst the first to attempt systematic rock-art interpretation (although, as Figure 2.1 demonstrates, most effort went into making very accurate drawings of the art). All these researchers (from before the twentieth century) tended to focus more on the rock-art's relationship to historical developments in the Near East. Often, such writers would interpret the art in relation to ancient Mediterranean civilisations, or, alternatively, perhaps included local folklore. However, these authors generally did not attempt to contextualise the art more locally, or ground it within social practice.

Figure 2.1 Simpson's illustration of Rothiemay circle, Scotland (Simpson 1867b, plate. 1).

2.1.2 British rock-art research from 1900 to 1980

Throughout most of the 20th century, rock-art research received little interest from British archaeologists. This may have been due to a number of factors. Firstly its isolated location or abstract style. Another reason may have been the desire to distance 'serious' archaeology from the art- given the subjective nature of its interpretation. However, from the late 1960s and early 1970s, there was an emergence of a renewed interest in rock-art. Ronald Morris (1974; 1977; 1979; 1981; 1989; 1993) published extensively, and was one of the first researchers to collect the art systematically-and whose most notable interpretation of rock-art in Britain was to connect the rock-art to the search for metal ores close to the sites. Stan Beckensall (1983; 1986; 2001; 2002; 2003; 2004; 2006; 2013) has contributed immensely to the recording of sites around Northern England over the past four decades- with a combination of discoveries of unknown material, and collection of known rock-art sites into reference books. In terms of interpretation, Beckensall draws heavily on his personal experience of rock-art found on Megalithic tombs in Malta (2002; 2009) that are generally thought to be related to fertility symbols. Beckensall (2009) is careful not to draw direct parallels to the British material and fertility symbols, although suggesting that the art should be understood as part of a wider emphasis on circles and the circular in British prehistory, which may have been a type of fertility symbol.

2.1.3 Rock-art research since 1980

2.1.3.1 Neuroscience

Post-processual archaeology from the late 1970s and into the 1980s began to place a greater emphasis on ritual practice in the archaeological record, which used ethnographic analogy as a basis from which archaeologists could infer social practice in prehistory. Rock-art's perceived ritual nature made it an important area of research. An interesting connection between neurology and rock-art was made when it was noticed that during clinical experiments into

drug induced altered states of consciousness, shapes and patterns emerged during 'trips' which had a passing resemblance to abstract rock-art- and maybe also to the patterns found on Grooved Ware pottery (Figure 2.2). Numerous authors from the late 1980s to the mid 1990s offered a neurological explanation for the rock-art phenomena (Bradley 1989; Dronfield 1993; 1994; 1995; Lewis-Williams 1986; Lewis-Williams & Dowson 1990; Lewis-Williams *et al.* 1988). They all commented on the parallels between dots, zigzags, grids, sets of parallel lines, nested curves, meandering lines and the artistic representations upon rock surfaces. The use of mind-altering drugs such as henbane (*lat. Hyoscyamus Niger)* may have been part of the art's production- and possibly as part of a wider shamanic ritual practice of Neolithic Britain.

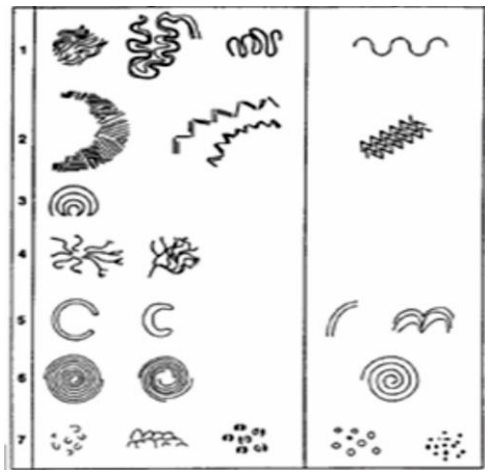


Figure 2.2 Images arising from altered states of consciousness from the human psyche (Dronfield 1996, Figure 1).

2.1.3.2 Landscape

Associating rock-art with mind-altering drugs (although within a scientific and neurological framework) did little to move rock-art away from the fringes of archaeology. Thus, a further attempt was needed to legitimise the art as a serious archaeological resource. From the 1990s onwards, rock-art found an approach which could move the art from its subjective, speculative or mind altering past, into a mainstream archaeological resource. Thus, landscape approaches became the dominant methodology and interpretation for understanding of British and Atlantic prehistoric rock-art (Beckensall 2002; Bradley 1997; Bradley *et al* 1993; Sharpe 2007; 2008;

Waddington 1998). More recently, this extended to include developments in (Geographic Information System) (GIS) analysis and virtual reality modelling (Gaffney *et al.* 1995; Winterbottom & Long 2006). Landscape approaches have offered the most sustained attempts to ground rock-art's meaning in practice (Bradley 1991; 1997; 2000; 2006; 2009; Bradley *et.al.*1993; Bradley *et.al*. 1994). Bradley (1997) is the most extensive investigation into rock-art as a wider western Atlantic phenomenon,-situated in a Neolithic and Bronze Age landscape, in those regions. Although dealing with complex issues, the text divides the landscape approach to rock-art into three main areas dealing with; (a) complexity/simplicity of art in relation to topography, (b) routeways, and (c) intervisibility. The main benefit of this approach is that all these areas can be studied empirically.

Bradley hypothesises that simpler motifs would be expected to be found in different topographic settings than those which could be considered more complex. This is based on the premise that simpler motifs or panels have less information than complicated ones. His spatial analysis of rock-art's position in the landscape of Britain suggests that this is true, and that complex motifs tend to be found at higher elevations in the landscape- whilst simpler motifs are found at lower elevations (Bradley 1997, 100-102). Secondly, Bradley has attempted to show that rock-art lies along ancient route ways. This shows that the people making the rock-art viewed the world from a hunter-gatherer rather than a settled farmer's perspective (1997, 81 and 120-123). Finally, Bradley argues that a desire to create intervisability between sites often determined their choice. Bradley's research places great emphasis on movement and interaction between landscapes and peoples. Movement through the landscape may help to explain some of the possible dynamics that may lie behind the creation of rock-art, along the Atlantic fringe, during the Neolithic and EBA. Bradley suggests that rock-art can be understood as 'signs' in the landscape. This approach suggests that the rock-art landscapes of Europe should be seen from a hunter-gatherer-forager perspective (essentially mobile), and argues

against modern expectations of landscapes that are centred on fixed resources and boundaries. This point is supported by the marginal nature (in terms of farming) of the rock-art producing areas where hunting would have remained an important activity (1997, 6 and 95-102). Furthermore, Bradley develops this hypothesis to suggest that such signs may have been a means of communicating information in an essentially tribal and mobile society. What is important is that whilst rock-art may have been associated with more mobile patterns of existence (2007, 217), the art allowed a certain level of connectivity between people and specific places in the wider landscape.

"All the carvings seem to be directed towards particular features of the terrain, and their sighting follows a predictable pattern. That would have been essential if they had helped to define access to specific areas of the landscape in a mobile pattern of settlement" (Bradley 1997, 190).

Bradley's (2009) investigation of rock-art as part of a wider megalithic art phenomenon, argues that the art should be thought of as contemporary to the ' air' rock-art found across Britain. Bradley argues that megalithic art and open air rock-art belong to the same tradition-although he is careful to state that this connection does not occur in every region (2009, 102). Only in Iberia, Britain and Ireland (with its passage grave art) can megalithic art and open-air sites be considered connected (although Bradley is quick to argue that there should not be any notion of a distinct style of megalithic art) (2009, 104). One of Bradley's main contributions to these debates is his suggestion that tombs with megalithic art may represent a microcosm of Neolithic society. The angular and curvilinear motifs that are found as part of the megalithic art style can also be found in domestic contexts- such as on pots or tools-and are further combined with circular motifs that are found in the open air rock-art sites. Megalithic art might, therefore, represent a combination of angular 'domestic' designs and curvilinear 'open air' designs. Furthermore, one could take this opposition further by suggesting that domestic (or mundane)

is opposed to landscape (or ritual) styles, which were combined together in Neolithic tombs to create a condensing of meanings. Bradley has identified an interesting dynamic process that may shed some light on the motivations behind the creation of rock-art-both on megalithic monuments and also at open- air rock-art sites.

Building and developing on Bradley's landscape work in Cumbria, Sharpe's (2007a) research is a collection of both new and known rock-art sites that emphasised movement through the landscape. Specifically, Sharpe has attempted to link the art to the movement of type VI stone axes from Great Langdale, through Langdale Vale and beyond, to the production of rock-art, (following on from some of the earlier observations made by Bradley and Edmonds (1993). Linking the rock-art in this way would help to provide much needed dates, since, according to this theory, the rock-art might be contemporaneous with the Harrison Stickle working site-which was dated from charcoal from the site to 3780-3530 cal. BC (Bradley & Edmonds 1993, 117). Furthermore, Sharpe has attempted to connect Cumbrian stone circles, axe collection and rock-art production, together (2007a, 161) with the lakes and rivers being used for the movement of axes out the region. Thus the art may have acted as a 'sign post' -directing people to the quarry sites (2007a, 161).

Sharpe (2007b) still emphasises the art's relationship to the landscape-connecting the art to dramatic and memorable features that may have provoked emotional and imaginative responses in the artists. Building on the fact that the rock-art sites in Cumbria are located at liminal places (which gives them an added spiritual dimension) she draws on Bradley's (2000) observation that the location of the art (and who could and could not see it), may have been an important determining factor in the choice of location. However, it must be noted that whilst such sites may appear liminal to us (and evoke emotional responses) this may have not been the case for Neolithic peoples. Furthermore, she suggested that rock-art in Cumbria may have been a precursor to more complex architectural statements, in an attempt to turn unadulterated space

into cultural place (2007b, 158). Finally, she suggests that the motifs at Copt Howe may have arisen from the desire of the carvers to represent the movement of the sun across the horizon (seen in Figure 2.3). Naturally, the movement of the sun (or other heavenly bodies) would have been important during the Neolithic- as would the surrounding hills. However, this suggestion that the art is actually a direct 'figurative' representation of the sun and the mountains of Great Langdale needs to be explored in more detail. Making such a suggestion requires a greater emphasis (in terms of research) that some, if not all, of the rock-art in Cumbria is perhaps not abstract, but figurative. This possibility will be explored in chapters four and five.

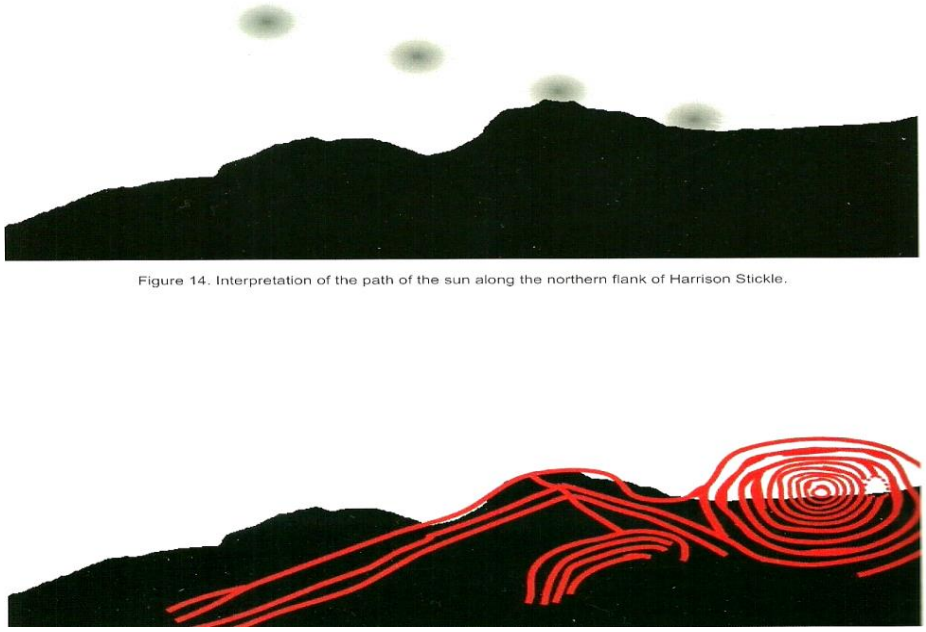


Figure 2.3 Landscape metaphors of at Copt Howe, Langdale, Cumbria. The motifs at the rock-art site may be connected to the movement of the sun over the hills in the background. (Sharpe 2007b, Figure 14).

Understanding the landscape dynamics (beyond movement and visibility) has become an important research aim of British rock-art studies. Jones, (2006) in his analysis of the rock-art panels in Kilmartin, shows that there seems to have been a specific choice in rock surface that

was naturally cracked and fissured (2006, 217). Natural rock surfaces that had the densest triangular/lozenge, crisscross cracks were found to be decorated with the most complex, unusual motifs- and, unusually, with some that are found in the Irish Boyne Valley passage tomb repertoire. The rock-art appears to enter and emerge from the rock via these points (2006, 218). Also, a desire to copy or mimic the natural patterns in the rock seems to have been important. Jones has shown that specific and important considerations went into the selection of rock-art panels themselves. This might suggest that the rock-art motifs were not only of great importance, but also the rock itself and the shapes underneath. Jones (2007) further extends his ideas and is critical of symbolic, structuralist and phenomenological approaches, as they 'add' meaning, rather than allowing meaning to arise from within the current of experience. The above approaches, from Jones's perspective, abstract meaning beyond experience (2007, 162). Perhaps, for Jones, meaning arises from the natural glacial carvings- since the natural world, and the carving panels, were probably saturated with symbolic meanings, prior to the rock-art.

2.1.3.3 Fieldwork

Excavation at rock-art sites has become a popular direction for British rock-art research in recent years (Díaz-Andreu *et al.* 2006; Jones 2006; 2007; Jones *et al.* 2012; Simpson *et al.* 2004). This has followed on from rock-art fieldwork undertaken in the 1990s (Bradley 1991; 1997; Bradley *et al.* 1993; Bradley *et al.* 1994). Rather than viewing the rock-art in its landscape (which sees the art in terms of its 'space'), fieldwork attempts to view the art within its wider archaeological context through 'time'. Recently Jones *et al.* (2012) has undertaken excavation around the rock-art sites at Kilmartin, in Scotland, to uncover the material culture left when rock-art was produced, and (by extension) what people did at those rock-art sites. Jones has addressed the rock-art at three levels; the rock itself, the activities around the rock, and issues of chronology, and the evolution of a rock-art landscape. Dateable material found

around the sites, suggested dates ranging from 2900-2800 and 2500-2300 cal. BC (2012, 261). Therefore, the excavations at Tiger and Lion Rocks have shown, almost certainly, that the rock-art production and use was between the Late Neolithic to Late Bronze Age (2012, 118). However, whilst such approaches are extremely important in helping us to date the rock-art (or at least the activity that occurred around the sites), they tell us little about the art itself. This is an important issue because, on the one hand, fieldwork attempts to draw the art into an archaeological sequence, but, in doing so, often places more emphasis on what happens around the art than the art itself. It is suggested here that fieldwork (at rock-art sites) places rock-art researchers in a position whereby they must choose what is more important- the 'art' or the activities that occurred around it. Naturally, both are important-but the researcher still has to make a choice in the first instance; whether they are interested, first and foremost, in the art, or what occurred around it.

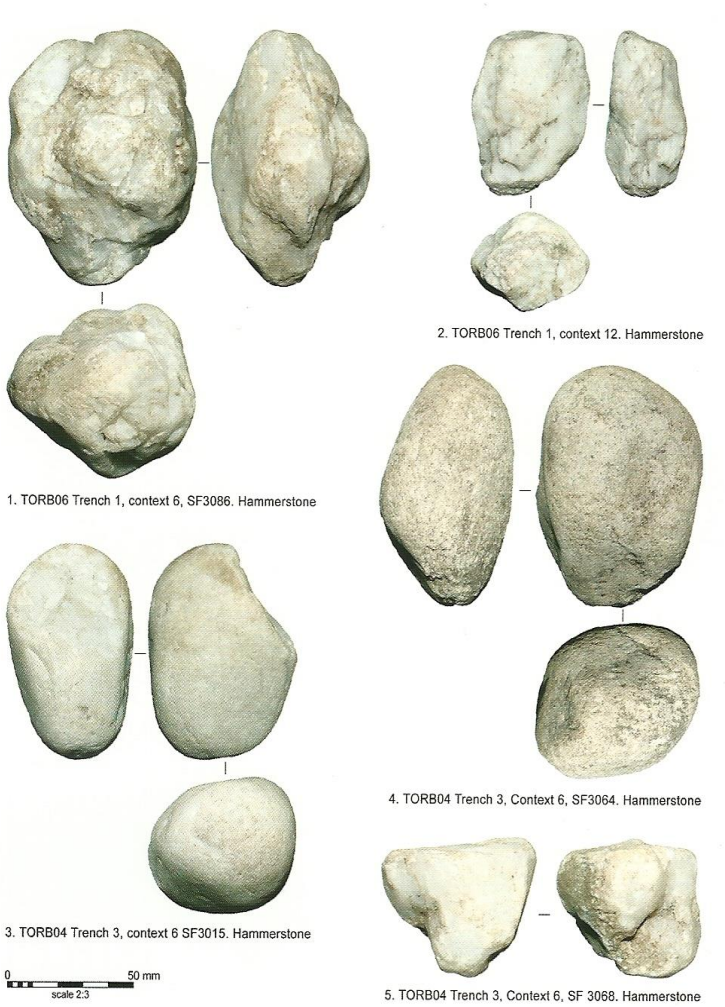


Figure 2.4 Quartz hammerstones excavated from around rock-art carving site of Tiger stone, Kilmartin (Jones et al. 2011, Figure 3.28).

2.1.3.4 Rock-art's incorporation into Bronze-Age cairns

Evans and Dowson (2004) attempt to move beyond the motifs (as they are found in the landscape) by discussing the issue of agency. They speculate on the original meaning of the rock-art as an expression of a "Neolithic belief system that was in decline and eventually abandoned" (Evans and Dowson 2004, 103). However, for them, it is the art's reuse in the Bronze Age that is significant- and consists of both cup styles and megalithic styles, both of which can be found in Cumbria. They argue that the reuse of these types of rock-art in EBA burial monuments shows an intentional act to make a connection to the Neolithic past. They suggest that the creators of the Neolithic rock-art (who chose to create rock-art on open 'living'

rock in the landscape) had a different ideology to those who decided to integrate the art into monuments, during the Early Bronze Age period. This suggests that such ideological resources could no longer be accessible and had to be closed off within EBA monuments.

Having identified an important dynamic behind rock-art, Evans and Dowson argue that such rock-art sites had power, and that the open-air location of the earlier sites, needed to be controlled by those who created EBA monuments. This process can be seen in the Eden Valley- although, like all processes, its beginnings cannot be strictly isolated to the EBA–and certainly this activity has Late Neolithic origins also. However, at a broader level, their explanation tends to speak more of the role and agency surrounding burial monuments, than of the rock-art. Similarly, such approaches fail to deal with the rock-art itself, claiming that its role/use is lost and can only be understood with reference to other more 'obvious' archaeological phenomena, such as burial monuments.

Vyner's (2008) investigation of rock-art sites in Cleveland and North East Yorkshire highlights that, unlike other rock-art regions in Britain, most are excavated finds from EBA burial sites. This gives a great perspective and an interpretation of rock-art's secondary, rather than primary use. The context of such rock-art tends to be associated with EBA burial or ritual monuments in Figure 2.5. The cup marked stones often shows little sign of weathering and may have been made specifically for the burial cairn. Vyner shows, like Evans and Dowson, that there exists a strong relationship between natural rock, rock-art, and monuments to the east of the Pennines. This process can also be seen to the west and in the Eden Valley. The suggestion is that rock-art motifs, in such burial contexts, seem to have been created long after the Neolithic- although usually on smaller and more portable artefacts- and usually only cup marks. Thus, the importance of the cup mark (despite its simplicity) shows that it has significance from the Neolithic and well into the Bronze Age. However, the evidence from Cumbria shows that,

although cup marking may have been important to the east of the Pennines during the EBA, to the west in it was not a significant activity.

Figure 2.5 The association between rock-art covered earth fast slabs and clearance cairns at Howdale Moor, Yorkshire (Vyner 2008, Figure 4).

2.1.3.5 Summary

Initially in the 19th century, rock-art enjoyed a relatively high status as archaeology emerged from antiquarianism. As archaeology became more scientific in the twentieth century, rock-art was often disregarded as beyond understanding- given the difficulty of applying a deductive method for its interpretation. As a result, for most of the twentieth century, rock-art has simply been recorded and catalogued in its own right, and for its own sake. By the 1980s and 1990s, social archaeology had developed its theory to such an extent that rock-art was no longer marginalised (although the attempts to reintegrate research in the 1980s may be characterised as an exercise in legitimatisation of rock-art as an archaeological resource, by analogy to neurological entopic phenomena).

Continuing on with this process of legitimisation, landscape approaches have come to provide 'the' working methodology for the understanding of British rock-art, and probably the Neolithic as a whole. This is a mixed blessing for prehistoric social theory and rock-art. Landscape approaches have undoubtedly shown that relationships existed between rock-art and its surrounding topography, the carvers, and the natural environment. However, what landscape insights gain in terms of their large-scale perspectives and empirical basis is often at the expense of our understanding of rock-art *itself*- and any possible meaning it may have had, as well as the deeper social dimensions that art seeks to express.

In response to this, some British researchers have looked at the basic issues surrounding simplicity vs. complexity, as a means of showing how the rock-art sites are constructed meaningfully. This is possibly the closest that British rock-art research has to a structural or semiotic analysis- like those carried out in France during the 1960s. Moreover, certain elements of this approach could be elaborated on to show how (social) meanings were produced using a complex interplay of motif styles and designs. Fieldwork approaches (and the integration of rock-art into Bronze Age monumental complexes) whilst offering important insight into dating (or at least the date of objects found surrounding the rock-art sites or within monuments), still suffer from the fundamental weakness that they do not engage with issues around the style, design form or grammar that constructed the rock-art, and tell us little about social process in the Neolithic-beyond the fact that rock-art existed. Having outlined the historical developments that have led to current understandings of rock-art in Britain, it is now necessary to outline the history of rock-art interpretations from Scandinavia.

2.2 Rock-art research in Scandinavia

2.2.1 Introduction

In comparison to British research, Scandinavian rock-art has enjoyed a diverse set of interpretive frameworks, and has generally been better understood in relation to wider

archaeology. Furthermore, the art's role in the reproduction of social relations is far stronger. This is probably a result of a number of specific historical and regional factors, which will be outlined in the rest of this chapter. The general theoretical and historical trends in Scandinavian rock-art will be first divided into a number of historical periods, before the 1980s. The earliest rock-art research focused only on the southern tradition and can be characterised prior to the 1850s as folklorist. After this period there was a growing interest in whether the rock-art was authentic and what possible age it may have been. With the emergence of culture-historical archaeology, the southern tradition was mostly seen in relation to historical events, and was, therefore, understood through textual (as opposed to archaeological) sources. The study of northern rock-art was linked to the ideas of cultural evolution from the 1900s onwards and, in some sense, predated the central ideas of processualism, by many decades. Moreover, Scandinavian archaeology cannot be historically divided into processual and post-processual periods; but there has certainly been post-processual influence in the region since the 1980s- and this will be discussed thematically.

2.2.2 Scandinavian rock-art research pre-1900

The first recorded and written historical document of Scandinavian rock-art comes from Sweden and was written by Peder Alfsønfrom in 1627 about rock-art at Backa, Bohuslän, South West Sweden (Bahn 1998, 1-29; Nordbladh 1980). Some sites (Nämforsen and Glösa) in Northern Sweden were already known by the 18th century (Hallström 1907, 218; Hallström 1960, 130). During this time, initial attempts at interpreting Southern Scandinavian rock-art often relied on folklore (Jensen 2002, 321-324), and it was only later, during the ninetienth century, that southern Bronze-Age rock-art was contextualised and understood through association with historical events. Åberg (1838), Holmberg (1848) and Montelius (1874; 1885) all suggested that the carvings were representations of historical events, often making reference

to ancient historical texts, especially Tacitus's histories (Glob 1969, 157). This was, by no means, totally accepted at the time- as research before 1900 tended to speculate if such depictions were even authentic, and how old they may have been. Norwegian archaeologists, at the time, thought that the painting from Hunnhammer could have been made by Dutch or Scottish sailors from the 16th century (Sognnes 1999, 466). Another suggestion was that the boat scenes were thought to represent narrative depictions of the Migration and Viking Ages (Christie 1837). Towards the middle of the 19th century, researchers began to realise that the carvings may, in fact, have been made during the prehistoric period. This led to the speculation that the rock-art may be linked to people bringing agriculture and a knowledge of metal working from the Near East; this could have influenced the rock-art in Southern and Eastern Sweden. To the north and west, there must have existed nomadic or semi-nomadic groups- and in 1845 Wetterberg introduced the hunting place interpretation Glösa, which has proved to be a very long- lived interpretation (Gjerde 2010, 25).

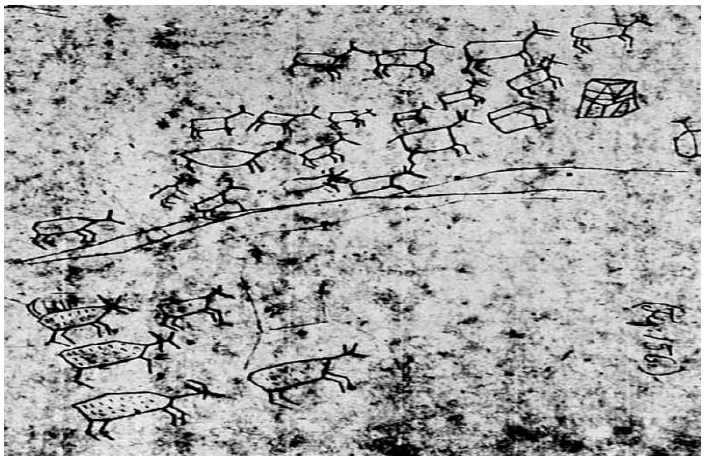


Figure 2.6 An early example of the recording of northern tradition rock-art from Glösa, Sweden (Mandelgrens, 1868 plate 7).

Towards the end of the 19th century, a different rock-art tradition was found in the northern regions of the Scandinavian Peninsula, whose content and style (Figure 2.6) differed from that of the southern type. P. Olsson, in the 1890s, found that similarities between Swedish painted rock-art sites and those in Russia, with figures found on Saami drums (Olsson 1898, 55-56). It

must be emphasised, however, that any accounts of rock-art before 1900 (of which there were only 18 sites known) (Gjerde 2010, 28), were limited to local myths and folklore (Bendixen 1879, 103; Lossius 1898, 10).

2.2.3 Rock-art research in Scandinavia from 1900

Early 20th century Scandinavian rock-art research was dominated, on the one hand, by Hallström, whose focus was on documentation and dating (Hallström 1907; Hallström 1908; Hallström 1910), whilst, on the other, Brøgger and Hansen focus more on the division between southern farming and northern hunting traditions (Brøgger 1906, 359; Hansen 1904, 323). It is this division which became the dominant interpretive framework for many decades-with few questioning its meaning (Ekholm 1917; Gjerde 2010, 29). What is significant about the hunter versus famer rock-art, is its basis in cultural evolutionism- fifty to sixty years before processualism introduced some of the same ideas into the English-speaking world. Brøgger, who based his idea on Reinach's theory (that Palaeolithic art was an aid to hunters magic) (Reinach 1903), made this connection to Northern Scandinavian carvings and painting both reflecting prayers to the gods (Brøgger 1909, 111; Brøgger 1925, 78 and 92). Thus, not only did hunter's magic link the rock-art to a successful hunt, it also linked the art of Northern Scandinavia to the wider Palaeolithic tradition found in continental Europe (Almgren 1934; Gjessing 1936; Goldhahn *et al.* 2010, 3; Hallström 1938).

Hallström seems to have taken less interest in the cultural evolution of the art, focusing more in the rock-art relationship to the natural world. However, rather than focusing on the wider, large scale landscapes of 1990's onwards, he places more emphasis on how natural features, such as, lines and cracks were used as part of the design (Hallström 1907a, 222; Hallström 1907b, 185). Furthermore, he notes the role that water played for the creators of the art, who often situated the panels close to water or had water washing from it (Hallström 1907b, 179).

This, as Gjerde states, was a century before the ideas became commonly accepted (Gjerde 2010, 32).

Through the 1910s, 1920s and 1930s, a number of research themes emerged. First was a result of the large-scale documentation of art over wider areas, which showed that there were similarities- not only in terms of style, but also landscape as well. This had the effect of reinforcing the hunter's magic theory, as the art seemed to be a reflection of a large-scale socio-economic practice based in hunting and gathering. Moreover, it was during the 1930s when it was realised that the art may have been produced over a long period of time, which directed research towards such issues as documentation, chronology and typology (Brøgger 1931; Engelstad 1935; Gjessing 1936; Hallström 1937). This seems to have reinforced the suggested evolutionary development of rock-art styles from naturalistic to more schematic representations (Gjessing 1936, 158-169; Hallström 1938, 183; Gjerde 2010, 36).

It was from the 1930s that ethnography began to inform rock-art research as to the religious practices of hunter-gather and semi-nomadic peoples of Northern Scandinavia and Russia. Gjessing was perhaps its most important advocate (Gjessing 1936; Gjessing 1942; Gjessing 1945). He introduced the idea that rituals were used as part of shamanism, totemism and animism. Gjessing seems to have introduced a socio-economic perspective, as he suggests that the desire to depict specifically big game hunting could be argued to be part of a wider development towards specification and a growing division of labour (Gjessing 1945, 314; Gjerde 2010, 38). Linked to this was the belief that such locations may have been used at certain times of the year, as ritual cult locations. At Nämforsen, Hallström saw the many boat motifs as representative of cultural contacts on both sides of the Baltic (Hallström 1945, 33).

Figure 2.7 Black and white photo of rock-art portraying elk, Northern Sweden, (Gjessing, 1936, Figure 3).

The 1940s, 1950s and 1960s were a quiet period in rock-art research, due to the pressures of World War Two and, perhaps, the Cold War- although there were some exceptions (Hallström 1960; Laushkin 1959; Simonsen 1958). By the 1970s, rock-art research in Northern Scandinavia (perhaps influenced by processualism) carried on the 1930s idea of the evolutionary development of style, and, by extension, culture of northern Groups (Gjerde 2010, 44). Bakka (1975) and Hagen (1975) argued for a long chronology, but Simonsen suggested that all of the art dated to the Late Stone Age (Simonsen 1978, 32-33)- suggesting that such stylistic changes may have been less protracted. However, Helskog was one of the first researchers to question such assumptions-identifying that there seems to have been no gradual change from naturalism to schematic animals at the Northern Norwegian site of Atla (Helskog 1989, 99-101). Helskog, along with Ramqvist, were part of the 1980s research that looked more at the natural world and landscape (Ramqvist et. al. 1985; Ramqvist et. al. 1986). Whether this is the case, such evolutionary schemes need to be understood, not only in terms of motif developments, but as part of the wider socio-economic hunter magic/hunting place interpretation of most sites (which argued for a long chronological sequence as the division of

labour and specifications occurred over time) (Gjerde 2010, 50). Either way, the place of rock-art within landscape seems to have won-out. From 1990 onwards, dating (Helskog 1999, 76) and ritual shamanic practice (Forsberg 1993, 244; Hesjedal 1994, 13), have given the rock-art a deeper grounding of social practice within the natural world.

The appeal of landscape approaches are their cost efficiency and the large scale comparisons that they can undertake (the ambiguity of what a landscape is, and what it means (Gjerde 2010) to archaeology, led to more anthropological and phenomenological approaches to enter into Scandinavian research- from what must be seen as an approach dominated by Bradley, Tilley and Ingold (Gjerde 2010, 51). However, whilst such approaches may have originated in Britain, they have been adapted to suit the needs of Scandinavian researchers. Due to upland lift and the often-coastal location of the rock-art (at least in Norway) -the landscapes have changed considerably since the art was made. Thus, more emphasis is needed on landscape reconstruction (Gjerde 2002; Gjerde 2009; 2010; Helskog 2004; Sognnes 1992; Sognnes 1994; Sognnes 2001). Furthermore (inspired by Lewis-Williams and Dowson) (1990), Gjerde shows how micro landscapes, or the natural rock, affects the nature of the carving (Gjerde 2010, 56) inside and outside of Scandinavia (Arsenault 2004; Bradley et.al. 2002; Faradejev 1993; Gjerde 2009; Goldhahn 2002; Helskog 1999' Helskog 2004; Nash 2002).

The link between rock-art domestic/ritual space (Forsberg 2000; Helskog 2000; Hesjedal et. al. 1996; Lobanova 1995) has highlighted some connections between settlement activity and rock-art. Moreover, the connection between hunting and rock-art is still significant- though such associations have been rejected by Sognnes (1992; 1994). Hunting pits, used for trapping elk are possibly linked to rock-art in Northern Sweden, which often lies along elk migration routes (Lindgren 2002, 65; Viklund 2004, 49)

2.2.4 Post-processualist and contemporary approaches

Since the late 1970s the number of researches focusing on rock-art has increased dramatically, as developments within wider archaeological theory have led to a renewed interest in it. Given its accessibility, fringe nature and the low research costs (compared with standard excavations), rock-art research presents an ideal opportunity to apply new and novel approaches. The final part of the Scandinavian section will deal with the interpretations thematically; structuralist, phenomenological, social interaction, landscapes, soundscapes and, finally, anthropology.

2.2.5 Structuralism

Structuralism and post-structuralism cover a wide field of discourse and cannot be said to belong to a specific area. Its application in 1980s and 1990s archaeology was to show how the arrangement of material and visual culture in the archaeological record was not random, but an attempt to create meaning through rules or grammar. It must be made clear that structuralism is a methodology, or perhaps a lens through which one can look at the world- rather than an interpretation, which falls under the category of hermeneutics- later becoming the concern of post-structuralism. Furthermore, structuralism showed that all social action has meaning and, importantly, it is through the material culture that such meaning is expressed. Moreover, such actions are often based on rules and conventions, and even the manipulation, inversion or breaking of such rules.

By using structuralist, post-structuralist and Marxist approaches, Tilley (1991) attempts to tackle the methodological problems surrounding how modern archaeologists can try to investigate rock-carvings. Tilley points out that rock carvings could be seen as linguistic metaphors. He suggests that the art could be read as a text, or a series of signs that produce meaning- as part of a wider system. Such structuralist approaches suggested that rock-art (like other forms of material culture) could in the present day, could uncover the original design grammar. Therefore, it is the rules of relationality and combination that need to be recognised,

as they communicate meaning through a structure-as in language. This analogy is then drawn to include material culture that, it is argued, can act in the same way. Thus, the methodological approach states that design combinations are not a random process, but structured according to a definite set of rules (Tilley 1991, 53). Therefore, it becomes the purpose of the analysis to identify structuring principles (Figure 2.9) throughout the rock-art site, in the Nämsforsen region. The motifs at this site show an intentional process of selecting suitable rock surfaces and using images that must have conformed to a set of predetermined principles. Furthermore, what could be argued as even more important is what is *not* selected to be carved-since the motifs that are missing can tell the modern researcher as much as what is actually there.

Nature			*Culture*		
elk (land)	fish (salmon) (water)	bird (sky)	shoe sole (land)	boat (water)	tool (sky)

Figure 2.8 Opposition of natural and cultural motifs at Nämsforsen and the meanings they produce (Tilley 1991).

Tilley sees the rock-carving site at Nämsforsen (which lies to the east of Jämtland) as a cultural, archaeological and ethnic interface between two worlds (albeit for different reasons than the ones originally highlighted by Hallström (1960)). Tilley sees the rock-art as a prehistoric and preliterate attempt at communication. Although verbal speech was the main form of communication (in a hunter-gatherer society), rock-art needs to be viewed within a similar context to that of meaning that is produced through communication.

Figure 2.9 Rock art at Laxön, Nämforsen (Gjerde 2010, figure 250)

In order to find meaning (which has a very specific social sense in this research) the basic underlying building blocks that make up the narrative, no matter how complicated they appear to be, need to be located. At Nämsforsen, the main design elements are elks, boats and humans- with the elk acting to link all other designs together (Tilley 1991, 57). Tilley has identified the following principles that are used to structure the carving sites; 1) lay out and display according to their relative importance as isolated elements or groups of the same pattern, 2) paired elements and 3) combining different pairs and/or single motifs to create different themes or meaning sets (1991, 80). Tilley suggests, based on the number of elk without antlers, that an underlying male/female structural opposition can be attached to boats and elks respectively (1991, 102) (although later he estimates that 15-20 percent of the elk have chin tufts and therefore are male (1993, 126)). Furthermore, tufts on the elk heads at the front of the boats are suggested-, by Tilley- to reinforce the maleness of the boats. Moreover, the fact that single line boat carving only has the male elk heads, whilst the double line carvings lack the chin (female), suggests that a further oppositional dynamic may exist with boats themselves. Thus, the

identification of social structures based in ‘maleness’ and ‘femaleness’ seems to have been a universal and underlying theme of rock-art. However, rather than a set of static categories, the narrative is created through the interaction, manipulation and inversion of these universal principles, as they play themselves out dialectically.

In opposition, Malmer’s review of Tilley 1991 (Clottes *et.al*. 1993, 117-118) has called this view into question, since the presence of chin tufts (always male), means that those elks cannot be female. However, Tilley had already planned for this by suggesting that simple binary oppositions often crumble under scrutiny and the nature of hermeneutic (and dialectics) and a more theoretically aware post-structuralist method, suggest a hermeneutic ‘spiral’ of meanings. Male elks, when they occur, simply reinforce the main feminine meaning of elk. Thus the presence of male elk with tufts reinforces the majority of elk motifs- which are female (although, as with any structural analysis, this interpretation merely constitutes a descriptive interpretation of some aspects of the carving forms and, as such, should be seen a starting point rather than a finishing point for analysis (Tilley 1991, 114)).

Sjöstrand (2010) has shown that elk depicted in Northern Sweden have a clear organisation, with elk that appear to be running represented in more chaotic contexts. Focusing on the large and complex Nämsforsen sites, Sjöstrand shows that elks with straight legs in figure 2.10 are connected to human figures, and that elk with angled legs are connected to footprints-, which undoubtedly was linked to binary concepts or categories of mobile/static, in the minds of the carvers. Moreover, there is another dynamic in relation to either surface pecked elks, which are thought to be older than contour pecked carvings (Forsberg 1993, 214). Not wanting to suggest that the carvings were representative of some final, fixed or isolated meaning, she suggests that this related to a wider conceptualisation of time (Sjöstrand 2010, 148). Sjöstrand suggests that the growing importance of time and movement was a result of changing patterns in the economy and settlement in the region, during the later Neolithic and EBA. Therefore, the move

from small scale and stable territories of Neolithic inland groups began to change into larger and more mobile settlement patterns-which, it is suggested, was reflected in the rock-art at this time.

Undoubtedly, these approaches uncover a dimension and a level of meaning that is often regarded as lost to the modern interpreter of rock-art narratives-especially when the art itself is so often ignored. That said, such approaches are highly ahistorical and tend to view the panels as being made and completed with a fixed idea behind its creation- along with the social structures and conventions that defined them. They do not, however, show the process of meaning in a historical sense, as meaning is often the result of many unintended and unknown factors (see the next chapter for brief discussion on Gidden's concept of *structuration*).

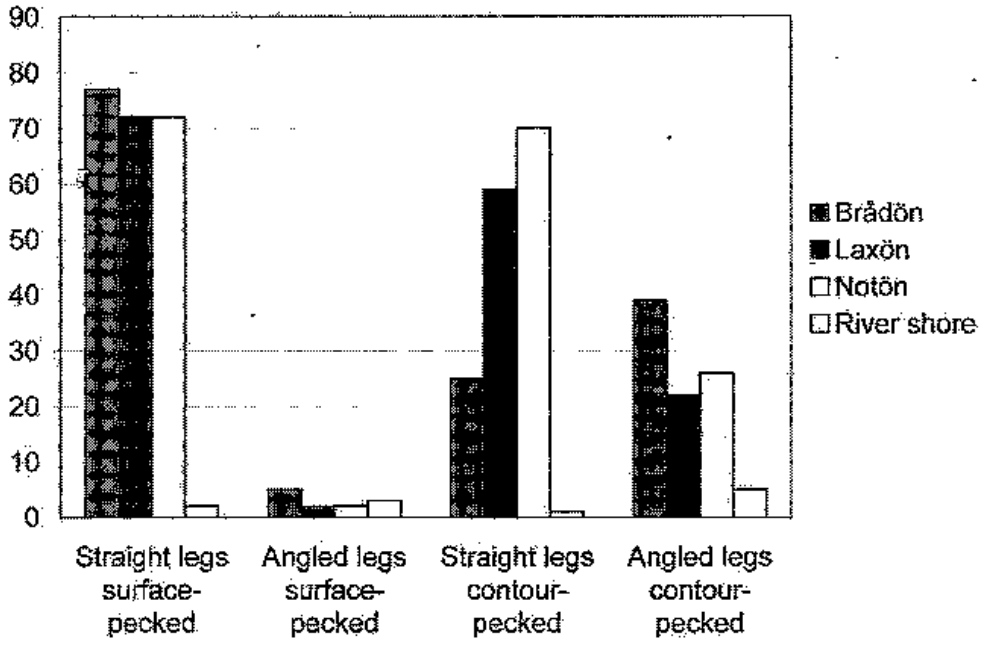


Figure 2.10 The distribution of straight legged vs. angled legged elk at sites in Northern Sweden. (Sköglund 2010, Figure 10.7).

2.2.6 Phenomenology

The twentieth first century saw a move away from trying to find the rules that structured the rock-art in an abstract sense, to focusing, instead, on how such structures were created and formed inside and through the human body. It is suggested that phenomenological approaches

emerged as a general shift occurred in archaeological thinking; away from structure, semiotics and language (which are too abstract in and of themselves) towards more phenomenology and agency centred approaches- in an attempt to tackle social questions that the rock-art poses.

Christopher Tilley's research into phenomenology and rock-art in Northern Europe, is built on the premise that there are meanings and interpretations which can be located at the level of *being-in-the-world*, rather than ideological sign systems- which is the case in structuralism, or the large scale landscape comparison. It is suggested that Tilley's initial move towards phenomenology was due to his frustration with structuralism and the intellectual dead ends of post-structuralism. Furthermore, the placement of rock-art motifs at rock-art sites, it is suggested, is in a relationship with the body of the carvers and the rock, or landscape-since phenomenology sees the human body as the central field of human discourse, rather than being in the mind or psyche- as is the case with pure structuralism.

Dealing specifically with NT rock-art, Tilley (2008) identified that the three major design forms -found at Mesolithic rock-art sites in Western Norway- are red deer, hooks/scythes and humans. This three-part division, seen in Figure 2.11, was also recognized in his earlier work at Nämforsen, in Sweden (Tilley 1991). This seems to have been a recurring theme, as a triad of motifs are often found at Northern Scandinavian rock-art sites (although what those motifs are can differ depending on the period and location in question). He further suggests that the rock-art narrative is about the control and transformation of the deer from a wild to domesticated state (Tilley 2009, 102). It was the journeying of the deer through the landscape- in a physical, embodied sense- that connected the deer metaphors to human development and transformations. This is what Tilley calls his kinaesthetic approach, which emphasises the role of the human body in the creation of meaning; it is as the human body travels through the landscape, that meaning is created. It is the body that experiences the natural world and, as such, 'perception is regarded as being both afforded and constrained by the sensuous human

body' (Tilley 2008, 19). Thus, rather than viewing rock-art as attempting to project purely idealistic metaphors, Tilley uses the human body to ground rock-art research in the real world.

Motif	Frequency	Percent
Red deer	731	34.40
Dog	3	0.14
Bear	1	0.04
Unidentifiable animals	168	8.00
'Snakes'	3	0.14
Humans	68	3.20
Hooks and scythes	511	24.10
Geometric motifs	71	3.35
Birds	2	0.09
Whales	3	0.14
Shoe-soles	2	0.09
Line fragments	322	15.19
Unidentifiable	235	11.08
Total:	2120	100.00

Figure 2.11 Motifs and their frequency at Vingen NT rock-art site in Norway. Excluding unidentifiable motifs the sites are composed based on three motif types; deer, hooks and unidentifiable animal (Tilley 2008, table 8).

More recently Ljunge (2010) used the phenomenological concept of inter-subjectivity to understand Northern Norwegian rock-art sites. This phenomenological concept (Matthews 2002, 51; Merleau-Ponty 2002, 403-435; Ljunge 2010, 90) is said to 'serve as a theoretical starting point, when aiming to understand the communication process that characterises our being' (2010, 90). This means that there is an active process happening between mind and place. Rock-art then acted to accentuate certain places in the landscape, in order to give it cosmological, ritual, social, and symbolic meaning; a large proportion of these meanings were due to bodily inhabitation of the rock-art sites in the landscape.

Centring understanding in the human body has had both positive and negative impacts on rock-art research. First the phenomenological approaches to rock-art (which are grounded in the human body) offer a level of analysis that is often neglected when using disembodied large-

scale analysis- like landscape or more abstract structuralism. Thus, rock-art is given a much needed human dimension. However, in practice, such approaches tell us far too much about the author's experience of the rock-art site or region, than they do of prehistoric peoples-erring at some points on a total subjectivism. That said, phenomenology might be used to explore deeper questions concerning social landscape interactions- especially if landscape approaches include phenomenological observations in their methods.

2.2.7 Social interaction

The role of interactions between different groups in Scandinavia, attempted to move interpretation away from the perceived subjectivism of phenomenology and the ideology of structuralism. Social interaction between Southern and Northern Scandinavian groups tends to be more implicit than an explicit research agenda. However, Walderhaug (1998) (in her investigation of rock-art of Western Norway) suggests that a better way of seeing the rock-art of the northern tradition is as an expression of hunter-gatherer groups coming into conflict with those agrarian people moving in from the south. Thus, rock-art becomes an expression of change (1998, 286) and a world in which various competing ideologies were attempting to dominate.

2.2.8 Landscapes and soundscapes

Given that rock-art is often found in geologically and topographically interesting regions, it is unsurprising that landscape approaches have become more important in Scandinavia. Although rock-art landscapes are a British perspective, they have found some favour in Sweden and Norway (although the more Continental focused researchers in Denmark and Finland seem less inclined to apply this British perspective to archaeology, as a whole).

Sognnes (1998) suggests that later 'Neolithic' styles tended to move inland, whilst the Mesolithic rock-art is more likely to be found close to the coasts. Sognnes suggests that movement inland represented a logical change in subsistence strategies, in the Late Mesolithic

and Early Neolithic in Central Norway. The northern rock-art has, undoubtedly, a maritime focus in its landscape orientation- with an emphasis on naturalistic elements. However, as it moves further inland, one finds less and less sea motifs; the dominant motifs here often being land animals and cultural motifs. This situation is also found in Eastern Scandinavia, towards the agricultural frontier, and along the Baltic in Sweden. Here, archaeological horizons such as the Pitted Ware Culture formed a Neolithic intermediary zone with the hunter-gatherer cultures, further inland to the north and west.

In a later research, Sognnes (2001) highlights the landscape context of the Stone Age rock-art of central Scandinavia-which is argued to have received far less attention than issues surrounding typology and chronology, in Norway and Sweden. Firstly, initial observations of the general inter-regional level location of rock-art sites, show that most NT rock-art is clustered around the coast and along major river drainage basins (2001, 199). Therefore Sognnes speculates that these routes (from the fjords of coastal Norway) may have formed major migration routes towards the central mountainous region, and into Sweden. Bradley made a similar observation along the western fringe of Europe (1997, 122).

In terms of their spatial relationship with the landscape, Sognnes suggests that Stone Age rock-art tends to be quite open and scattered, on noticeable topographic features and close to the sea-with a clear maritime orientation. At the Stjørdal Valley (Norway) the carvings seem to guard the entrance up the valley to the higher mountains and forests, and are found on open rock surfaces (in contrast to southern rock-art during the Bronze Age, which is argued to be more hidden).

Moving away from landscapes to soundscapes, Goldhahn (2002) speculates that sound may have played an important role in the reasons why rock-art was carved in certain places, close to rapidly flowing water in Northern Sweden (Figure 2.12). The location of rock-art close to water seems to have been an overriding concern for rock-art creators. Although not all sites are

noisy in Northern Sweden (art can be found next to silent waters, such as lakes) the majority of the sites are close to rapids.

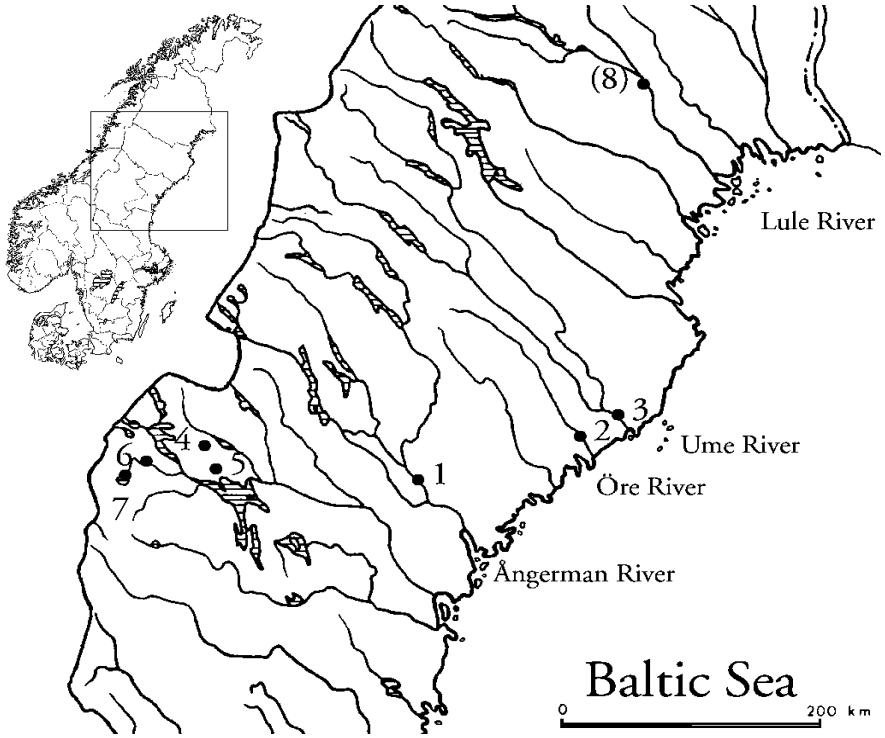


Fig 2.12 Rock-art sites and the major river systems of Northern Sweden; 1 Nämsforsen; 2 Läxforsen; 3 Norrforsen; 4 Gärde; 5 - Glösa; 6 - Duved; 7 - the engraving sites at Ånsjön; 8 - Porsi(uncertain). (Goldhahn 2002, Figure 2).

Using the site at Nämsforsen and Läxforsen, in Ångermanland, as an example, Goldhahn suggests that the location of the rock-art- next to the roaring rocks, where normal communication is impossible- played a role in why these sites were chosen. Normal activities and speech are impossible at such sites, which further emphasises their liminality and, perhaps, was a metaphor for the hidden or secret meanings that the art may have encoded. Thus, the importance of landscape contexts is supported by the relationship between sites and the surrounding topographical and geographical features- such as watercourse, lakes or unusual rock formations. This allows a certain distance and objectivity to formulate principles that can compare and contrast rock-art over wide areas. However, landscape approaches generally fail

to explain motif forms and the arrangement of motifs at a site- precisely because landscape approaches treat rock-art as a site in a landscape; sometimes more detailed and small-scale approaches can uncover perspectives that would be missed by viewing rock-art through the lens of a landscape approach.

2.2.9 Anthropological

Anthropological and ethnographic approaches have been far more popular in Scandinavia, as seen in Figure 2.13. Furthermore, Tilley (1991) and Goldhahn (2002) have drawn extensively on ethnographical and anthropological concepts, in relation to Nämsforsen. Tilley regards the motifs at Nämsforsen (1991) as elk totem figures, and the boats as representing a means of undertaking cosmic and shamanic journeys of the mind (analogous to the journeys of boats along the Ångerman River).

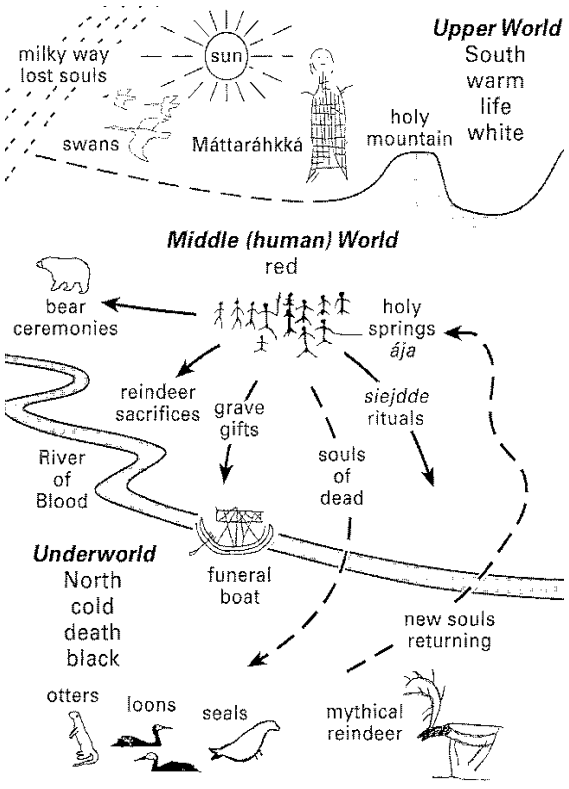


Figure 2.13 Understanding Northern Swedish rock-art in relation to Sami mythology (Mulk & Bayliss-Smith 2006).

Fuglestvedt (2010) links the development of styles during the Late Mesolithic in Northern Scandinavia, to the anthropological concept of *churingas* -the Australian aboriginal word for a totem (which has already been explored by Tilley (1991). Goldhahn (2010) investigates rock-art's relationship with the landscape; undoubtedly the creation of rock-art was a meaningful and ritual action. There is, however, little discussion within rock-art research regarding how art can help make place out of space (Ingold 1986; 2000). In essence, what Goldhahn is suggesting is that researchers of rock-art often take the issue of place at face value- but do not pay additional attention to why rock-art may have been carved there in the first place. Goldhahn attempts to analyse this using the Maori concept of the *Hau,* which seems to resemble a Hegelian absolute spirit (*Geist),* with the ritual of gift giving outlined by Mauss (1954) perhaps representing the symbolic and dialectical movement towards *Hau.*

Figure 2.14 Naturalistic rock-art in typical northern Scandinavian location, on vertical rock face, close to water. Photo: Gustaf Hallström 1907, after Gustaf Hallströms research archive, Umeå, Sweden.

Applying these ideas to the research area, the evidence of economic activity at Nämsforsen suggests rock-art here is related to a number of activities; 1) salmon fishing, 2) the creation of

red slate daggers and 3) red ochre production (Fuglestvedt 2010, 114). Moreover, since red slate daggers had to be brought from outside the Nämsforsen area, they may have been exchanged for salmon and ochre, at that site. Thus, a common link between rock-art sites is that they are associated with the quarrying of materials (soapstone, red ochre, quartzite, quartz) and their exchange, as part of ritual gift giving (2010, 119). Furthermore the placement of rock-art in the landscape gives the area a *hau (*or spirit), which meant that it could become a *place* (as opposed to *space*) in which communication and exchange could occur-along with all the social, ritual and economic engendering of social relations. However, such discussions from an anthropological perspective tend to lead to the same ends (outlined in chapter 3) as landscape approaches to rock-art; in the words of Goldhahn 'putting the images to one side enables us to move beyond the images and the rock-art site to explore other pathways' (2010, 122).

Bolin (2000) discusses the three most common motif types in northern Sweden; elks, boats and humans. It is suggested that these design elements are related to a form of social/ritual practice during the Neolithic and EBA. Bolin outlines some of the central elements of 'shamanic' practices in the North-the most important of which is connecting the physical world to the spiritual world, along a cosmic river. The idea that a Shaman travels along this metaphorical watercourse to intercede with the gods (Anisimov 1963; Bolin 2000, 157; Drury 1996, 14; Tilley 1991), is reinforced by the physical location of much of the art. The locations of rock-art next to water must have been a significant part of the art's meaning. Bolin further suggests that there is a difference between the 'type' of water that rock carving and rock-painting sites are located next to. Carving sites tend to be found by rapids and swift water- which may be associated with the 'cosmic river' like those found in some forms of Siberian Shamanism (Anisimov 1963, 166; Tilley 1991, 132; Bolin 2000, 161)- whilst other rock painting sites are located on steep rocks which fall away into calm water.

Away from water, the elk (which makes up about 90 percent of all motifs in Northern Sweden) is argued by Bolin to be the conceptualisation of an elk ancestor of the local population group. According to Bolin's speculative narrative, the elk is said to have moved up the Ångerman River, populating certain regions (later moving up the tributaries to populate the settlement sites that are found further inland (Bolin 2000, 168)). Whilst one may disagree with the interpretation (due to its heavy reliance on Siberian ethnography), elk certainly did represent a core ideology for the people who lived in this region. The representation of 'new' motifs (Baudou 1993, 261) must have been the result of external Late Neolithic/Bronze Age influence in the region, as the shoe soles and circles with crosses did not belong to the Northern World in Ångermanland (Forsberg 1993, 244). Bolin simply sees this use of southern motifs as evidence that the hunter's rock-art was 'alive and well' during the Bronze Age (Bolin 2000, 173). He rejects the possibility that the new motifs were the result of a change in the ethnic population with a differing economic farming base that is suggested elsewhere (Baudou 1977, 144; Kristiansen 1987, 82; Tilley 1991, 163).

The use of anthropological analogy, however, raises many difficult questions, since specific and often contemporary ethnographic examples are used to understand rock-art (that is thousands of years old). Moreover, the biggest issue here is that many anthropological approaches contradict themselves by, firstly, rejecting the evolutionary frameworks of earlier processual approaches, but then simultaneously reaffirming an ethnographical analogy which sees all primitive peoples (at all times and in all places) as sharing a similar belief system- simply because they are primitive.

2.2.10 Scandinavian rock-art summary

Before the 1980s, the only social understanding of northern Scandinavian rock-art was that hunter-gathers may have made the art to either mark certain areas as hunting grounds- or as an expression of primitive magic. The influence of post-processualism led to a number of

approaches that explored the art's social significance; all have their weaknesses. Structuralism tended to be *ahistorical* and ideological-at the expense of agency and practice. However, the approach can show how the carvers constructed themselves socially- through ideology- and uncover the way in which they attempted to communicate their ideas of themselves to a wider audience. Phenomenology can be excessively author focused- often verging on subjectivism at times- but, positively, it deals with the rock-art at a level between the detailed macro analysis of structuralist approaches and the large-scale landscape methods. Landscape approaches have a tendency to place too much emphasis on the wider topography- often at the expense of the art itself. However, on the plus side, they inject much needed objective research, and can give us a larger scale of perspective, which allows us to make general observations regarding prehistoric movement and people/landscape interaction- which can then be channelled into a boarder understanding of Neolithic social questions. This point is important since landscapes can often help us understand exchange systems in the Neolithic. Finally, ethnology and anthropology can inform understanding and help frame research questions and agendas-but they have a tendency to explain and interpret rock-art in a universal sense- when used as a basis for interpretation.

With a few notable exceptions (Tilley 1991; Nash 2002; Sjöstrand 2010), the actual meaning (or structure) of the rock-art itself is generally ignored in favour of placing the rock-art within an external matrix- be it the landscape, the human body or ethnography. Despite their strengths, what all these approaches fail to do is to examine meaning, by regarding it either as lost or totally subjective. However, meaning is not speculation, but rather linked to specific social concepts surrounding the structure. Thus, to ignore the meaning of rock-art is to ignore the very process that the carvers used to construct their art,-and it is this level of analysis, (the level of meaning) that has generally been neglected-not only in NT Scandinavian, but in rock-art research, in general.

2.3 Discussion

Current rock-art research (in both regions) is the result of a number of historical and regionally specific factors. This section will first discuss some of the similarities, and then the differences between the researches in the two regions. Firstly, in terms of similarities, both regions-whilst naturally showing variations- have generally followed the same historical developments. Rock-art research in both Sweden and Britain, before the nineteenth century, enjoyed a higher status than during most of the twentieth. It was not until the 1970s and a greater archaeological interest in ritual and meaning, that rock-art, once again, had a platform. Rock-art-on both sides of the North Sea- has benefited from this greater desire to discuss meaning and ritual practice in prehistory.

A second similarity is the lack of diversity in terms of interpretive frameworks applied to the rock-art in both regions. In Britain, most research is landscape focused whilst in northern Scandinavia rock-art research is deeply entrenched in ethnographic analogy-although there are exceptions. Thirdly, in both regions, researchers are often too cautious when attempting to understand the social context of meaning. In Britain, it is normal to discuss rock-art's meaning in relation to the landscape, whilst in northern Scandinavia, ethnographic examples serve the same purpose. However, whilst it is important to discuss meaning within a context such as a landscape, there still should be room to explore meaning of the art itself, and its affect on social practice. The final similarity is that in both Britain and Scandinavia, rock-art research is heavily focused on the type of recording that serves only to reinforce an overly aesthetic response to the art-emphasising the visual at the expense of the art's role in structuring social relations.

Having discussed the similarities, it is now important to look at the differences in the research between the two regions. Firstly, Swedish rock-art is better integrated into wider archaeological narratives. This is more the case in Southern Sweden, but is still true with northern tradition rock-art. This may be a result of its more figurative style, as apposed to Britain, where the

abstract design form has meant that the art is often regarded as meaningless- or at least too subjective to interpret. A second difference is that whilst, one may argue, the ethnographic approaches are the main interpretive framework of the northern tradition art, there is still a greater variety of approaches than in Britain. Finally, possibly the biggest difference between the two regions is that it is generally more acceptable to discuss meaning of the rock-art in Scandinavia. This could be due, again, to its figurative nature- but it seems more likely that it may be a result of a less empirically focused mind-set due to the influence of continental philosophy; in comparison to British archaeology and it analytical philosophical focus (see Chapter 3).

2.4 Conclusions

It is not really possible to speak of approaches to rock-art, grounded in social practice, prior to the 1980s. The influence of post-processualism allowed researchers to direct their energy towards applying sociological methods to the archaeological record, and the number of structuralist and post-structuralist methods at the time was testament to this. However, since the late 1990s (and especially after 2000) the number of archaeological and rock-art researchers that have attempted to ask purely social questions, has declined. In their place, objectifying and aesthetic tendencies (which serve a growing technological alienation) have filled the gap. It is suggested that behind the current trend towards aesthetics, is a growth in, what may be termed, historicism- which will be explored in the next chapter. Those rock-art researchers who are still interested in social dynamics, tend to see social relations as more of an environmental/social interaction. Landscape and phenomenological approaches-whilst addressing some aspects of social relations- are, in most cases, too environmentally deterministic. In Scandinavia, ethnographic evidence has tended to soften the landscape, and the environmental determinism inherent in British archaeology. Moreover, since ethnographic evidence from Northern

Scandinavia often focuses mainly on social structure in native society, this, perhaps, explains a greater willingness to assess the rock-art's social value.

Having outlined the historical trends and the current state of rock-art research in Britain and Northern Sweden/Central Norway- from a social archaeological perspective-an important question has immerged. Despite the claims of early post-processualists (Hodder 1982), why did social theory fail to have a wider impact in archaeology generally, and rock-art specifically? In the next chapter, the possible reasons for this will be explored. These are argued to have been the separation of historicism from materialism and how, with the help of current structuration/agency centred approaches in archaeology, social theory may, once again, become a significant discourse in archaeology and rock-art research.

CHAPTER THREE

Theory and methodology

3.0 Introduction

In chapter two, it was shown that the way in which archaeology is interpreted has generally moved away from the social theory towards more spatial (landscape), phenomenological and aesthetic frameworks. Archaeological social theory describes how the individual objects (the material and visual culture of the past)- as well as the people who made them- functioned as part of a wider social whole. Historical frameworks tend to emphasise the randomness of historical acculturation, whilst spatial analysis sees the art in relation to space, landscape or the environment. By far the most perilous, from a social perspective, are aesthetic approaches that seek to escape the past and efface social conflict from the archaeological record. In this chapter, however, the focus will be on the role historicism (minus its materialism) -or the historical process- objectivism and aesthetics in wider archaeology and rock-art research. Historicism (according to one definition) is a focus on the contingent nature of the past, rather than upon the material base. This approach views the archaeological record as an accumulation of material objects, reflecting an undirected, and ultimately random- rather than dialectical-process. Furthermore, the general tendency towards more objectified and aesthetic perspectives will be explored in relation to historicism.

Section 3.1 of this chapter will look at what is meant by archaeology as random history and process, and it will be shown that, as time progressed, the systemic archaeology of post-processualism was replaced with more historicism- rather than historical materialism- and a rejection of the role of the system, in past social and individual action. This antagonistic

relationship between historicism and the system, in archaeology, will be explored-as well as the effects that this has had on interpretation.

Section 3.2 will investigate the nature of meaning creation (in archaeology), to show that meaning can exist within a dialectical system that is played out through time (in a historical sense) but is, nevertheless, guided and structured according to an underlying system. Meaning is important in archaeology, since it was often the expression of the collective will to order and organise social relations, through time. Furthermore, to overcome the perceived ahistoricism of historical materialism, and the Hegelian dialectical process in relation to social theory, Giddens' idea of structuration will be assessed and adapted, in an attempt to overcome the tension that exists, in archaeology, between historical processes and the search for conflict within social systems.

Finally, having looked at archaeology as history, archaeology as system, and how through structuration an attempt is made to reconcile the 'system' with interpretive practice, section 3.3 will explore the nature of meaning creation, and the possibility of finding social meaning in prehistory practice. It will be explained how the dialogue and text will be used as a reference point to ground theory into practice, throughout the rest of this thesis. A textual analogy to the rock-art (as opposed to viewing the rock-art as text) is a means by which not only history and process, but also social structure and social systems in prehistory, can be explored. By viewing rock-art dialectically- as a dialogue and as a product of an inherent discourse on Neolithic social life- some of the bigger questions, concerning Neolithic society, may be answered. The analogy of a dialogue and the discourses can provide such a basis (methodologically speaking) to show rock-art as having been constructed according to a system, structure and grammar-but also as situated within historical contingent social practice.

3.1 An archaeology of history and process

Having looked at the historical background in chapter two, and the affect that this has had on the methodologies used to research rock-art in Northern Europe, one of the most significant events to occur in archaeological theory is the rejection of the system in understanding social relations. The effect of this is the rejection of meaning in archaeology. Meaning, here, has a very specific and social definition; how communities ordered ideas, things and themselves- as a means of producing and reproducing social practice.

In reaction to this, there is, on the one hand, an emergence in contemporary archaeology of more data rich, objective, and aesthetic approaches- whilst those who still engage with the archaeology at a social level, are becoming rarer and have tended towards either landscape and environmentalism, or exploring agency. This has resulted in archaeology becoming more historicised in its interpretation. Some may argue that this is a natural consequence of the 'dead end' of post processualism (which will be explored later), as post-processualists generally became more and more subjective in their accounts of the past. This assertion is reinforced by the fact that most subject and deconstructionist authors, in archaeology, were originally part of the post-processualist vanguard (Edmonds 1999; 2004; Hodder 1989; 1994; Pearson & Shanks 2001; Thomas 1991; Tilley 1994; 2004; 2009). Many of those who were the most interested in finding 'meaning' in archaeology, inadvertently (or purposefully) led to its rejection because of the subjectivity of their approaches. Although this may seem a bold statement, it is realised that there are few who actively set out to specifically reject all meaning, in the archaeological record. However, it is important to clarify what is meant by a loss of meaning; here, it is understood specifically as the rejection of the social system and social structures (within archaeology), since it is only through meaning-in this sense- that such systems are given their legitimacy (the details of which will now be explored).

3.1.1 Archaeology and the loss of meaning

Processual archaeology- as it became known- emerged in the United States in the late 1950s, as a reaction against the largely European culture of historicism paradigm. The method placed a central importance on understanding prehistory through the use of ethnography and anthropology. This was unsurprising given the close proximity of archaeology to anthropology in North America (many departments were often an amalgamation of the two disciplines). The basic premise of this movement was that one could identify an underlying cultural evolution in the archaeological record. As a result, identifying evolution and the evolutionary dynamics behind the archaeological record, was the basic premise of New Archaeology. Methodologically speaking, this could be achieved using deductive models and logical positivism, to identify evolutionary change in prehistory and, as such, all prehistory could be viewed within an evolutionary system of ever increasing complexity.

It was during the latter part of this movement (in the 1970's) that systems theory was first applied to prehistory-albeit with limited success (Dunnell 1980; Hodder 1994). Systems theory provided a means of describing the feedback mechanisms that are inherent within all systems. Thus, systems theory is useful when attempting to describe *how* cultural elements interact. It is, however, very poor at explaining *why* such interactions occur in the first place. Processualism had used rather vague, evolutionary explanations to explain social processes and structures; however, by the late 1970s these became more difficult to sustain. This meant that the inadequacies of systems theory (and processualism, as a whole) created a fertile ground for systems theory to be wedded to initially ethnographic literature, as well as structuralist, post-structuralist and Marxist ideas. Thus, as a means of overcoming the inherent weaknesses of system approaches- when applied to the archaeological record- ethnography, structuralism and Marxism became useful hermeneutic tools. It was in this mixture of systems theory that the growth of the post-processual movement occurred- since systems theory and processualism

could not interpret the archaeology without recourse to crudely evolutionary explanations. Systems theory cannot explain change, but only describes those changes (Trigger 1989, 308).

Therefore post-processualism (or 'interpretative archaeology') developed as a framework that emphasised subjectivism and its role in understanding the archaeological record (Trigger 1989, 451-452). Methodologically speaking, post-processualism included a wider range of approaches (structuralist, Marxist, phenomenological and gender interpretations). All these approaches- whilst coming from a diverse set of fields- were united in their critique of processualism, and the assumption that if the scientific method could be applied rigorously enough to the archaeological record, then purely objective conclusions may be deducted.

An initial attempt to move away from the objectivism of the earlier processual movement could be found in structuralist, methodological applications to the archaeological record. Originally the concept of Swiss linguist and semiotician Ferdinand de Saussure (1983), it was later applied to anthropology by Levi-Strauss (1962; 2008) and, ultimately, made its way into archaeology with Hodder & Orton (1976) and Hodder (1982). At its basis, structuralism suggests that all human understanding is rooted in conceptual dichotomies (hence its linguistic basis), which are universal to the human mind. Furthermore all elements, within a culture, need to conform to an overarching cultural system that dictates the rules of that culture, and what their meanings are. Practically, in archaeology, one of the best examples of its application was by Hodder (1990),who suggested that the ideas and the symbolism of the Neolithic in Europe were based upon the division between the *domus* and the *agrios* -which occurred across a 'boundary'- and emphasises the unity of the apparent oppositional concepts. Meanings, for Hodder, are always dialectical in nature.

Thus it becomes obvious, that the major strength of structuralism can just as easily become a weakness; its universal and ahistorical character. The universal nature of structuralism fitted easily into anthropological research in the 1960's (Levi-Strauss 1963; 19683b) and, by

extension, into archaeology (Hodder 1984; Richards 1990). Pope has shown how structuralist frameworks, in archaeology, have often been supported using formal analogy. This assumes that if the source and subject (such as modern hunter gatherers making rock-art and prehistoric rock-art in Northern Sweden) have some common properties, then others can be expected to (Pope 2007, 209). However, in practice, such analogies are drawn from regions within totally different historical and geographical settings,and this creates a kind of general 'other' narrative that is good for explaining all anthropological and archaeological social systems- at all times and in all places. Furthermore, given the tendency towards the narrative, in generalising human action (2007, 209)- and the back projection of contemporary ideas about the past-structuralism, as an interpretive device, tends towards seeing the modern in the pre-modern. Therefore, problems seem to emerge in this case, when one blends the universal nature of structuralism with the specific and peculiar character of ethnography. Pope's biggest objection is that structuralism (as an interpretive device) is often considered simplistic, and is unable to appreciate the complex dynamics behind human agency (2007, 207). As a result, 'bottom up', agency focused archaeology has attempted to fill the void.

3.1.2 Deconstructing the nature of post-processualism

Post-processual archaeology led to a greater emphasis on locating meaning, symbolism and structure in the archaeological record (Hodder 1982). Objects entering the archaeological record, it is argued, often did so according to an underlying set of cultural rules that did not adhere to functionalist or deterministic ideas underlying processual archaeology. However, the archaeological record was still predetermined (according to post-processualists) but instead of environmental or social evolutionary determinism, culturally and socially driven rules expressed a universal need and desire of people to create order, meaning and structure; material culture was the media through which this could occur. However, in the 21st century the desire of archaeologists to locate meaning, structure and symbolism, within the archaeological record,

has diminished. What has replaced meaning and structure can be grouped into one of three categories: (a) aestheticism (b) landscapes/phenomenology, and (c) historicism/agency.

Firstly, there are approaches that may be characterised as a form of archaeological aestheticism, which has taken one of two forms. The first is a highly sensual, artistic approach to archaeology. This trend is exemplified by Pollard (2001), who views Neolithic depositions as aesthetics of deposition. Pollard suggests that the bringing together of things in this way, by Neolithic people, could be argued to have created and aesthetic effect. Along the same lines, Gosden typifies many of the aesthetics/agency approaches by arguing that aesthetics can be extended to include those things that appeal to the senses. He further suggests that practices directed by culturally specific systems and values, carry their own kind of aesthetics (Gosden 1999, 176-7). Gosden, like many who use aesthetics and agency, feels that it is self explanatory to speak of 'constructed forms of social action' without discussing what their construction or structure was. That is not to say that the research of Gosden and/or Pollard is not excellent and well thought out; the issue is that social and cultural systems cannot be used to legitimise aestheticism in archaeology. It is hoped that future research, either way, can be more honest about its research aims.

The second aesthetic direction in archaeology is the growing dominance of highly objective and data rich narratives that seek to draw archaeology back into the scientific field- denying its socio political value. However (unlike the Scientism of Processualism), once all this data is collected and expressed, then the true purpose often emerges; the desire to visualise and aestheticise prehistory. Since the data or the recording cannot be an interpretation, the archaeological text becomes simply a collection of graphics, tables and visual aids. Furthermore, this is not helped by the research agendas of funding bodies that favour more scientific and, ultimately, aesthetic approaches to prehistory. However, unlike the original processual age of the 1960s (which worked within a well-defined theoretical basis link to social

evolutionism) this second processualist age -of the contemporary period- tends to lack any real theoretical directions. In fact, what unites current developments are their total lack and/or rejection of social theory-seeking only to collect data and visualise it as part of the 'post-archaeological' aesthetic narrative. One may argue that the textual aspect of archaeology and rock-art research is becoming more marginal.

Secondly, approaches that are based in landscape or phenomenology lie conceptually between the first and third group; although landscapes are closer to neo-processualism, phenomenology is more aligned with historicism and agency. However, what unites both methods is their basis in the natural world, where material culture is analysed and interpreted through the environment. Whilst both consider social questions, phenomenological approaches tend to emphasis the individual- whilst landscapes, due to their broader scale, often consider wider social processes, as well.

Finally, those researchers that are still concerned with more humanistic and social dimensions of prehistory, have moved towards historicism (that is stripped of its materialist basis) and agency. Burr suggests that hermeneutic and post-structuralist writers (two of the main driving forces behind post-processualism) often reduced all things into *process* and continuous becoming (Burr 1990, 37). As a result, one may suggest that agency centred approaches have become a kind of interpretive framework of 'becoming', as they are used, in a limited way, as a means of addressing a number of interactions (such as landscapes or the human body), and features of prehistoric society. Grounding prehistoric agency in the landscape, or phenomenologically, of the *body-in-the-world* perspective, has reduced the meaning that historical materialism gave as a directing and guiding force in (pre) history.

The specific reason for this move away from social meaning, it is suggested, was the fact that many of the authors who were in the vanguard of the post-processual movement (and hence the ones most concerned with finding meaning in social practice) became more and more

disillusioned and subjectivist over time (Edmonds 1999; 2004; Tilley 2004; 2008; 2010). Burr's desire to 'blur' the gap between fantasy and reality-seeing them as part of the same continuum- had a 'profound implication for understanding the paradoxical nature of writing, speaking and the human condition' (Burr 1990, 37). This was the case, especially in relation to those who undertook the initial research aims of post-processualism- of finding meaning in the archaeological record. Thus, with increasing subjectivism (verging on fantasy) the inevitable has occurred, as more 'objectivist' and scientific approaches have filled the theoretical void left by the failure of post-processualism to find meaning and social structure in archaeology.

Therefore, the failure of post-processualism-at an interpretive level- has meant that process and historicism has taken over from meaning and social content. As a result, more focus and energy is now directed towards the technological processes of archaeology-such as excavation, data collection and recording, without a similar amount of effort being directed toward their interpretation. Ironically, the loss of meaningful social action in archaeology occurred because many who had originally called for more meaningful archaeological narratives, fell victim to their own deconstructionist tendencies-tendencies that had always been a marginal influence in the post-processual movement. As a result, there are now approaches that emphasise either the subjective experience of the author (phenomenology), or the subjective experience of native peoples who make or use rock-art (ethnographic literature). On the other hand, there are more objective approaches that understand rock-art as aesthetic and visual, or as part of a discourse which seeks to mask social conflict in prehistory. Landscape and environmental archaeology perhaps occupy the middle ground- although there is often a tendency to relegate social practice.

Whereas objectivism and data rich approaches still dominate archaeology (although this is changing), in rock-art research, the issue of aesthetics is obviously a more important consideration. Naturally, when one makes a rubbing or laser scan of an image of the art, one is

being objective. To then view the object outside of its social context is to view the art aesthetically and thus reinforce a privileged way of seeing it. Herein lies the danger of aesthetic approaches- and their technologically based alienation- that makes up the vast majority of rock-art literature (since it can be used to reinforce aesthetic approaches to archaeological research), often seeking to deny the art's social impact.

This is not an attack on objective or data rich approaches because they lack validity or are not useful-but simply because they prioritise certain ways of 'looking' at prehistory, whilst ignoring and rejecting others. Furthermore, objective approaches that are not subject to rigorous social theory tend towards masking and rejecting conflict that is related to gender or class, from archaeology. The issue here is that with the collapse of the post-processual movement (along with its search for meaning in social structure) those forces which seek to visualise, objectify and 'aestheticise' archaeological research, have been given a free hand-mainly because the extremes of subjectivism and the deconstructionist tendencies of the period after the post-processualist movement meant that no real intellectual defence could be offered. However, it is argued that by returning to the issue of socially dependent meaning and social structure in archaeology, this, then, can be used as a platform to begin to produce more rounded archaeological narratives.

One of the most controversial aspects of this (and which has led to the extremes of objectivism and subjectivism) is whether meaning can actually be found in the rock-art. Currently the consensus is no- or, at least, that meaning cannot be found in the rock-art *itself* as a closed artistic and cultural expression of a unified social system during the Neolithic; rock-art is only understood as meaningful through a number of histories or processes; some being more subjective (phenomenology) and others more objective (landscape)-but both are united in their attempt to show meaning as a relationship between the rock-art and any number of external factors (i.e. the human body, native people's experience, topography or wider material culture).

However, if it is possible to produce meanings through relationships-either with the landscape or the body-then it should also be possible to find meaning in the rock-art itself, as an outcome of social relations.

Therefore, the aim here is to show that socially determined meaning in the rock-art can be found, but only if the *system* that organised and structured the placing of motifs (at rock-art panels) can be located- and not just the process behind its creation. In order to do this, the basic premise behind the current trends in archaeology (which reject the meaning inherent within any social system) have to be called into question. Rather negatively, Burr states that 'an analysis of a post-structuralist type proceeds by continually effacing fixed relations, blurring traditional distinctions with a graphic logic to follow the movement of dualism' (Burr 1990, 41). 'Effacing fixed relations', it is suggested, means that historicism separated from materialism, and undirected processes, have taken precedent over meanings grounded in practice and directed by social system. Whilst the majority of archaeological, or rock-art, researchers are largely unaware of the theoretical basis of their approaches, it is suggested, here, that rock-art does have a specific kind of social meaning; one that can be understood as part of a social system-since all processes and history need to be conditioned by a systems which allow them to function.

3.2 Meaning in archaeology

In section 3.1, the main theoretical directions of rock-art (and wider archaeology) were examined, showing that; a) rock-art theory, whilst used to support theoretical shifts in archaeology, as a whole, does not have a well defined body of theory itself; b) that if rock-art is to refine, or redefine, its theoretical background, then it will have to look towards the directions that have taken place within wider archaeology; c) the general trends in archaeological theory may be termed as post-archaeological aestheticism, since there is a growing, underlying rejection of meaning and investigations into social theory,-whilst there is

a growth in the aesthetic based textual discourse that seeks to objectify and visualise prehistory. Naturally, few archaeologists are explicit in this goal. It is suggested, however, that this is a logical outcome of current trends.

Agency methodologies have attempted to challenge the objectivist, scientific, visual and aesthetic trend- and are backed by a rigorous theoretical basis outside archaeology (Archer 1996; Bandura 1989; Callinicos 2004; Giddens 1979). However, such issues of social conflict and inequality tend not to be explored- in an attempt to depoliticise social theory. The purpose of this is to make archaeology acceptable to the forces that seek to aestheticise and objectify the archaeological record. Agency (despite its benefits) lacks, within its methodology, a means of advancing social research in prehistory, because it fails to locate social meaning and social structure-since they are both grounded in conflict and inequality. This is, on the one hand, simply an outcome of the difficult application of agency approaches to the archaeological record, but also because it lacks a methodology that investigates social structures and discourse- since post-archaeology down plays social conflict. Therefore, a solution is now needed in rock-art research (and archaeology) that can create a balance between historicism/process, on the one hand, and meaning/structure, on the other. This would challenge the slide towards aesthetics and visualisation. In order to do this, it is necessary to consider the process by which meaning is created.

It is suggested that ‘meaning’ is the product of the dialectic process; with this in mind, it is necessary for there to be a reappraisal in contemporary archaeology- of its role and function- if, both the objective and subjective are to be brought together. In wider social theory, this has already been attempted (not always successfully), using agency centred approaches. This approach, with some modifications, will be used as the methodological basis for this research. First, however, an attempt needs to be made to integrate social structure with historical process- to discern how such a system can be methodologically applied to a prehistoric setting.

3.2.1 Structuration

As highlighted above, a major criticism of structuralism, in archaeology, was that it is too general and focused on structure- without enough emphasis being placed on historicism and process. An attempt to overcome the limitations of structuralism (although not stated as such) was by means of structuration theory. Firstly, in order to better understand society and social processes, one needs to develop a social theory that moves beyond the inherent difficulty of understanding social life as individual or total, base or superstructure, structure or historical process. Giddens' theory (1981) of structuration attempts to reconcile the duality created when society is divided into structure (system) and agency (process). This duality shows that social structures are both a medium and an outcome of social practice. It is suggested that time/space relations are articulated, in social systems, as a means of generating power. Power, within the theory of structuration, is regarded as being generated in, and through, reproducing structures of domination (Giddens 1981, 4). Giddens, unlike Thomas (1999), views power as a driving force and, to a certain extent, outside the historical process. Therefore, structuration can be seen both as a social process *and* a social system since Giddens, naturally, was aware of the intellectual dead-end of explaining process without reference to structure or system.

The issue of power is key in structuration, and needs to be explored in more detail. However, in order to do this effectively, the origins of the structure/agency debate must be retraced back through the history of social theoretical research, to its origins in master/slave dialectics of Hegel (1977) and Marx (2000). Giddens (like Hegel and Marx), sees two types of resources that enter the structure of domination; (a) domination of human beings over the material world, or allocated resources and (b), domination over the social world itself, or authoritative resources (Giddens 1981, 4). Therefore, the closed system of the social structure creates its own structures of domination, from within itself. This, however, does not necessarily explain why social change occurs, but only describes such changes as the outcome of a dialectic

struggle between those with power (dominating) and those without power (dominated) (Hegel 1977, 111). For Giddens, power is central in the creation of the state because it attempts to extend and reproduce forms of authority and surveillance. However, since we are dealing with non-state social organisations in prehistory, the range and degree of technologies of surveillance will be limited (Barrett 1994, 162).

According to Giddens, within structuration, all social action consists of social practice situated in time/space (process equating to time, and structure to space), and organised in a knowledgeable fashion by human agents. For Barrett, 'agency involves the transformation of the biological being into the social being, through knowledgeable action' (1994, 165). Furthermore, history is created when knowledgeable beings engage with the material conditions of their existence; this is required for human action in the world-, which is always a reworking and transformation of a material reality (1994, 169). As a result, knowledge is always 'bounded' by unacknowledged conditions of action, on one side, and unintended consequences of action, on the other (Giddens 1981, 19). In essence, Giddens seems to suggest that a large part of the social totality is sustained by unacknowledged conditions and unintended consequences. Naturally, Giddens is moving away from Hegel and Marx by not giving his historical process any meaning or purpose (beyond social action for social action's sake), which is a key dynamic and at the basis of the agency driven, social practice. In this sense, Giddens is a contemporary writer, and rejects the system, along with most post-structuralists (although he does give power a kind of pseudo status of a structuring principle, somewhat akin to Nietzschean will-to-power, which directs human social action).

Outcomes of an act (agency) exist far beyond the narrow confines of the human mind, and, as such, the human actor can only know so much about his or her actions and the consequences they may/will have. Having knowledge of why the social act occurs, then, is less important than having power-as power can be seen as the driving process and the structure through which

social change occurs. Thus-although not explicit- there is a sense that underlying, unconscious, and unknowable factors shape social systems and, through structural analysis, they may be uncovered (although Giddens is careful not to give his conceptualisation of power any real form, and does not attempt to pin down what 'power' means, in the real world). Therefore, what is needed is to understand the relationship between social structures (which are the form that a social action takes), and the social systems that guide them.

Giddens is careful to separate structure and system, as systems are composed of patterns of relationships between actors and collectives and are reproduced across space and time- whilst structures exist only in time, as moments recursively involved in the production of the social system (1981, 27). Structures are like frames from a movie; in themselves they do not make a film, but once agency and power is added, the illusion of reality occurs. As a result, systems are real (they can be empirically studied, as they are visible as social processes), whilst structures are atemporal. Social systems are how groups of people operate, whilst social structures are descriptions of the way such systems operate. Thus, social structures from social systems can be inferred, but not the other way around. Naturally, what archaeologists can do is describe social structures by looking at part of the social systems in prehistory. However, there is a necessity to try and fill in the gaps, as there are only a few remains left to work with; this can be achieved by creating a context. The nature of any given social structure is a synchronic snapshot of that social system, at any given time. In essence, structural analysis of rock-art makes no claim to provide a historical account of the art, (or its build up) as this would entail describing the social systems, and this would need to take into account wider social processes.

Archaeology, it could be said, is an arrangement of ahistorical snapshots of social structures that are put together to create a narrative of prehistoric social systems. Returning to the film analogy, an archaeological narrative is created in the same way that a movie is made up of 24

frames per second, to create the illusion that the actors are moving; archaeological narratives, and their discussions about prehistoric social life, give the same sense of the movement of social actors. Thus, structures can be analysed as rules or resources, in an attempt to find structural principles- or 'principles of organisation' (1981, 27). However, current archaeology produces narratives that cannot explore social systems in prehistory, since Giddens suggests that structures are as important as the processes that run through them. Since current archaeology deals more with history than structure, there is a situation similar to running a cinema projector without any film. The machine can be seen to work along with the movement of the parts (prehistoric social processes) but the screen is blank since there is no film (social structure). Rock-art is one of the Neolithic snapshots that is available to understand social structures in earlier prehistory. Only when these 'snapshots' are joined together, using the archaeological narrative, is the illusion of *the* narrative created.

3.2.2 'Power' and its role in structuring social relations

To summarise, the current theoretical and interpretative void in archaeology is the result of historicism and process being given more importance than structure. A second issue is the continued slide towards aestheticism, due to historical and process-based interpretive frameworks that are not strong enough to withhold the movement towards an ever-greater objectification, data collection, and an overall visualisation of prehistory. As a result, methodological approaches are replacing interpretive ones.

In order to reverse this situation, and reintroduce structure and meaning back into archaeology (and halt aestheticism), it is necessary to show the processes through which all meaning is created-the dialectic process. The system-building philosophers, Hegel and Marx, tended to emphasise the structural aspects of the dialectic, whilst existentialists, such as Nietzsche and Heidegger, tended to place a greater emphasis on time, power, processes, history, and becoming. Today, as far as archaeological research and wider social theory is concerned, the

latter are far more important than the former. The historical trend was reinforced by writers such as Foucault, who continued the existentialist concern with history, process and time. This is evident, from Foucault's introduction of the concept of *épistèmes*, which sees all knowledge conditioned, historically, by the possibilities that exist in each historical epoch (Foucault 1980, 197) As such, there is no knowledge (or anything) outside time. Thus, it is understandable why writers such as Baudrillard (1981), Derrida (1998) and Lyotard (1984) have moved social theory further away from structure and system. The consequences of this shift have been felt in archaeology, as well as in other academic areas.

Giddens (1979; 1981) attempts to overcome this problem by positioning himself between the two extremes of structure/meaning and process/agency. Thus, structuration, with some modifications, is the basis upon which the research methods, here, will be built. Whilst Giddens is not a system builder, in the Hegelian sense, he still maintains that structure and systems (in social theory) do exist, and that they are not simply the product of process, history, becoming, or agency. Giddens (1981) hints that, in order to overcome the duality inherent in understanding social theory (either as process or structure), structuration should be seen as an attempt to reconcile the dichotomy. It is here that the importance of power can be seen as the mediator of social action, and a device for reconciling two polarized social concepts. Although Giddens' concept of power is connected to time, agency and practice, he still argues for the need to locate social structure in order to understand the social system. Power and time are placed as the force that animates structures with a given system. Furthermore, if, or when, the focus on 'power as time' becomes important once again, then archaeology will be well placed in the vanguard of a new social theory- since archaeology views time in a very condensed and unique way. However, what needs to be understood by archaeologists who apply time and agency approaches to the archaeological record, is that they are trying to arrive at an understanding of

the wider social system that was in operation. In the final section, the methods that can allow archaeology to achieve this task will be explored.

Barrett's (1994) theoretical analysis focuses on the separation of the individual social actor from his or her wider collective social experience. He elaborates this point by emphasising the contrast between what can be regarded as short term, individual, fleeting, local and subjective moments, in the archaeological record, and that of long term social processes (Barrett 1994, 2). Barrett is keen to move social archaeology away from what he sees as research that focuses too much on deeper underlying structures. The fleeting individual moments, in the archaeological record, are argued to be as important as the deep, long term social rules and conventions that shaped them. This sets the tone for what Barrett will develop into his agency based approach. What is at issue here is that, unlike culture history, archaeology (which suggested that society existed prior to, and separate from individuals- or later, post-processual Marxist and structuralists that were more concerned with general rules), Barrett is arguing that it is how material culture reinforced memory making and channelled practice that should be social archaeology's main focus (1994, 95).

This leads Barrett to attempt to show structure as an agency based, feedback mechanism where agency produces structure, which then goes on to structure agency. The methods used should focus more on routines, memory and practices that are, for Barrett, a 'gamble' played against nature (1994, 95). However, issues of causality aside, seeing structure as the result of agency has the effect of reducing the importance of social structures .Structures are explained as the unintended consequences of social acts whose outcomes were not fully known or realised by the individual and wider social group, at the time they were made (Giddens 1984; Barrett 1994, 36). This idea of social structures as simply a product of unintended acts is very powerful and is, perhaps, Barrett's most important suggestion.

Barrett sees each individual moments in time as an opportunity for people to create values by negotiating social situations to their advantage-thus, explaining social change. The act of forming a *habitus* makes history dependent on human memory, as daily practices are grounded within human action. The process of learning how to act, then, is one learned out of practical experience (1994, 14). Barrett, like Giddens, is arguing that external, social structures need to be grounded (in a practical sense) within the subjective. This grounding for Barrett, Giddens and Bourdieu, is sometimes literally in the human body as the practical application of, what may be termed, 'muscular social theory' (although memories, *habitus*, biographies, and practices have their interpretative limits). While Barrett's explanation of the development of Neolithic cursus monuments, as a ritualisation of processional walks, is very interesting, it does not really explain why they were walking and creating memories across the landscape, in the first place.

Barrett's obvious strengths aside, there are unintended consequences of social theory- when it is understood without reference to structural dialectics. It seems that the conflicting and deeper collective nature of social theory cannot easily be reconciled within frameworks based in practical agency approaches that reduce the role of inequalities as a main driving force within all social systems. Although Barrett is certainly correct in rejecting social structures based on the evolutionary, 'social' archaeology of the processualists (Barrett 1994, 161; Renfrew (1982, 8-9), the issue remains; how can social dialectics be united within social theories, grounded in practice. The danger comes when, in the place of inequality and social conflict, the role of the individual, and their experiences and memories of '*being-in-the-world*', tend to fill the gap. That is not to say that such analysis should not be undertaken, since agency is as important as structure, conflict, power and inequality.

Barrett overcomes this structure/discourse problem by moving social archaeology forward to analysing the communication discourse between material things and people (Barrett 1994, 19).

Discourse is the practical linking of context to language. The architectural discourses, central to Barrett's study, are focused on the way in which monuments (as contexts) guided particular types of social discourses. Thus, Barrett, rather than viewing human action as dialectically structured, sees a number of reoccurring structured practices that are, perhaps, different ways of saying the same thing-only the first is interested more in inequality and conflict.

Finally, it is suggested that Barrett shows that discourse cannot be separated from our understanding of text. However, he sees the act of reading as always a move beyond text, because the text, and the interpretations, are always trying to break free from authorial intentions and references (1994, 19 and 76). Many problems are created when text-, which is just formalised speech, is created. The main problem is that people may engage in a conversation that has long since passed. Talking is a more immediate relationship between participants, but, in text, the author is noticeably absent from the discourse. For Barrett, it seems that the readers are forever alienated through distanciation, because to accept the existence of a text (in this case rock-art as text) is to accept that there is the existence of an author *in absentia (*1994, 79). Barrett's move away from structure to agency frees the archaeologist from having to locate original meaning, to, instead, seeing the numerous potentialities material culture may have had. For Barrett, like many post-structuralists, authors should never get in the way of their texts.

3.3 Approaching social structure through social systems

In the previous section, it was shown how social systems are an important part of prehistoric research. However, to reach an understanding of such systems, a few modifications to current methodologies, is needed. The first step is identifying a social structure; this may be a rock-art panel, burial or pit deposition; something that can be regarded as a 'snapshot', or still frame,

of a wider social whole. In essence, this is an emphasis on the fractal nature of the social system, since all parts are reflected in all the others, no matter how small or insignificant they may seem. The second step is to develop a social context into which the prehistoric social structures fitted. Context can, then, fill in the blanks to support social research, and will be explored in the first part of chapters 4 and 6. In the remainder of this chapter, the theoretical basis for the methodology will be outlined. How this can be applied in a prehistoric setting, will also be discussed.

3.3.1 Rock-art dialogues

In practical terms, to undertake a structuralist analysis of any 'culture system'- be it writing, ordering of a house, what clothes people wear- you need to locate the basic building blocks upon which 'meanings' are produced. Structuralism is reductionist, in its pure form, and as a result, tells us little of social systems. However, that does not mean it is not a useful tool, and, when applied to suit specific needs, it can help us begin to understand social systems in prehistory. This part of the analysis will be undertaken in the next chapter. The goal of chapters 4 and 6 is to reduce the art down (no matter how complex) to its most basic and simple form. This was the goal of many structuralist writers who were trying to reduce complex cultural systems to their bare essentials. Naturally, as Trigger stated, this tells us 'how' such a design element was used within the system- but not the 'why', since structuralism, in and of itself, is a pure methodology (Trigger 1989, 308).

However, it is not enough to simply show how symbolic systems are arranged; what is necessary is to show how, within the structures or systems themselves, there are a number of other meanings that are occurring at the same time- and that reflect different temporal aspects of the cultural system you are exploring. First is the 'structure', which is an atemporal/ahistorical level. The second level of meaning is applied to what is called the ‘discourse temporality’, in order to show how such meanings (identified in the initial

structuralist research) work across time. Then, some way of explaining the basic, underlying structure- and how it contributed to, and helped shape social interactions- is needed. Since it is suggested that all art or material culture has a communicative dimension, what is needed is to show how the objects being studied (rock-art) communicated their meanings (their 'discourse', or dialogue). A discourse is created within the 'text' and also between 'texts'. One might think of discourse (or dialogue) as the practical application of the 'rules' that will (hopefully) be found in the first stage of the analysis carried out in chapters 4 and 6- and which will be explored and expanded in chapters 5 and 7.

Finally, this leaves us with the issue of how to explore agency in a prehistoric setting. Chapter 8 will look at the issue of agency and rock-art through the movement of stone axes in Cumbria, and slate knives in Jämtland-in an attempt to explain how the same social processes affected art production, along with the movement of stone in those areas.

3.4 Summary

Generally speaking, there is a consistent move away from social structure and the meanings that they created, in favour of a growing emphasis on historicism without its materialism, phenomenology and landscape/environmental archaeology. Whilst this is a positive development, in one sense, in another, it is leading archaeology towards creating an extreme kind of discourse where social practice is separated from any form of meaning and structure connected to social conflict and inequality. However, the separation of meaning and structure (and its rejection) from social practice is unnecessary. By re-evaluating the role of the social system, outlined by Giddens, the method outlined, here, applies a model that can investigate social processes, grounded in historical materialism, as well as social structures that express the conflict surrounding inequality. The reason for this disconnection is an inability to translate the theory of structuration into a methodology that can be applied to the archaeological record. This has allowed scientific, objectifying, visualising and aesthetics to creep into prehistoric

research- whose purpose is to deny conflict and inequality in prehistory, by rejecting social theory that argues the contrary.

By addressing social questions using a textual metaphor, the (well grounded) arguments against 'material culture as text', and the excesses of structuralist ideology can be avoided. At the same time, the methodology can integrate agency centred approaches into social practice in prehistory. Material culture, as a 'metaphor for text and dialogue,' can help us develop a methodology that answers both questions that concern social structures, and those concerning social processes. In order to do this, a number of steps need to be undertaken. Firstly, there is the need to develop a context. Secondly, the archaeological remains (in this case rock-art) can be viewed as a 'snapshot' of the social structures. Thirdly, the narrative can start to 'animate' the archaeology by considering the inherent dialectical and dialogical nature of the archaeological material. Finally, by viewing the archaeology as a dialogue, rather than simply a text, (methodologically speaking) to energise an otherwise static frame of prehistoric social life (the rock-art panel), the method can begin to apply agency centred approaches. The ultimate goal is an understanding of the whole social system, in which the rock-art formed only a small (albeit visible) part.

CHAPTER FOUR

Cumbrian rock-art I

4.0 Introduction

The previous chapters explored how historical developments (chapter 2) have led to specific theoretical directions (chapter 3), that have generally led to archaeological narratives placing more emphasis on process, objectification, data collection and historicism (minus the materialism), whilst less and less emphasis is currently being placed on the systems that support social theory. The outcome is a slow slide towards a 'post-archaeological narrative' whereby the archaeological record is aestheticised (and hence, depoliticised) to the point that tables of data-along with high quality visual computer graphics- will have replaced all textual and social discourse. In order to overcome this situation, it was suggested that a coherent methodology that can view the prehistoric evidence (in this case, rock-art) as historically contingent, but also, more importantly, structured according to an underlying social system (which made prehistoric social acts meaningful). It was suggested that by using the metaphor of a dialogue (and thus identifying the basic discourses of prehistoric society-reflected in material culture), a post-archaeology that is centred in computer based aesthetics and alienation, can be avoided.

The transition from theory into methodology requires a number of steps to be successful. Firstly, in part 4.1, the rock-art needs to be situated within a context that is made up of a number of sub-contexts (environment, human/environment interaction and archaeological). Secondly, section 4.2 will attempt to 'read' the rock-art narratives and identify the basic design elements of Cumbrian rock-art. Often, the desire to situate rock-art within a landscape or within the body, leads to the art itself being ignored. The purpose of an 'internal' rock-art analysis is to define the basic building blocks of this rock-art tradition, and to identify the art's basic structuring principles. Once the basic 'letters' have been established, the underlying rules that

determine their arrangement can be investigated. The hypothesis is that rock-art (like all other forms of communication) is structured according to a limited number of meaningful symbols- which were articulated and rearticulated in order to create meaning. Tilley argues that speech, phonetic writing, and material culture be considered as communication, and that all are structured in ways that centre on the creation of meaning (Tilley 1991, 16). However, although some of the principles developed by Tilley in Sweden are used here, it is not the purpose to return to viewing rock-art (or material culture) as text. Instead, by using a textual metaphor for the methodological approach outlined here, the criticism levelled against pure structuralism can be avoided. Especially since structure will be linked to discourse and agency, in the following chapters.

Finally, part 4.3, will discuss the basic underlying structure of Cumbrian rock-art, and which motif combinations were important. The purpose of identifying the 'letters' (and their arrangement) is not that rock-art is a text, but to show that one level of understanding is based in a textual metaphor- and this is important when accessing the art's sociological significance. In the next chapter, the second level of meaning within the social system is centred in discourses- but discourse needs a structure and framework to work within. All texts (modern or prehistoric) need a 'con-text' from which they emerge-and the most basic context is the rock itself. Figure 4.1 shows how the levels of 'con-text' will be built, one upon the other, to create a totally integrated social approach to the prehistoric rock-art.

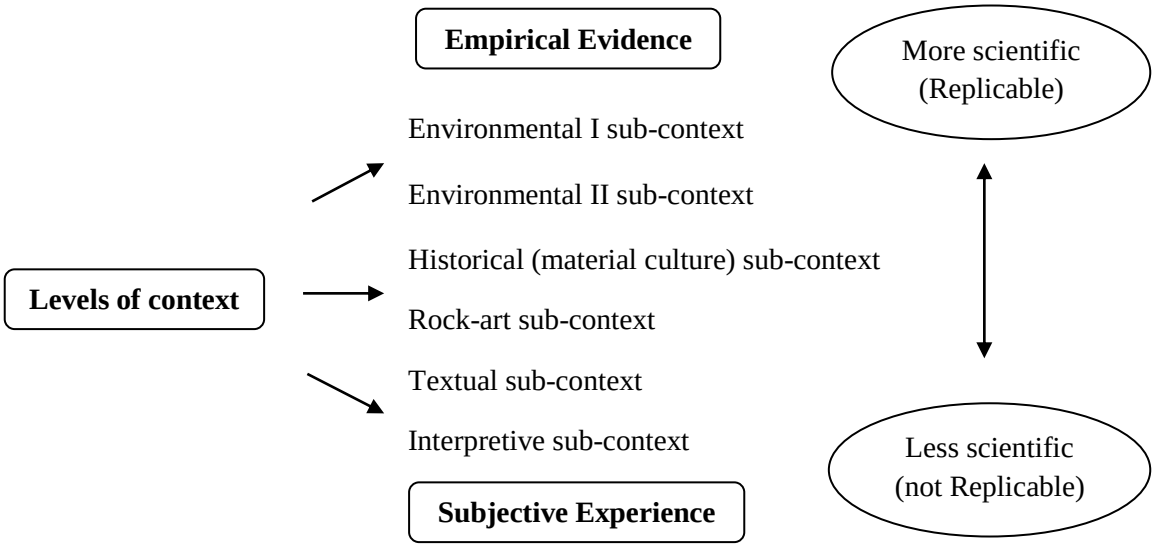


Figure 4.1 Levels of rock-art textual context, moving from objective to the subjective.

4.1 Environmental and historical sub-contexts

4.1.1 Environmental sub-context I: Cumbria before people

Barrowclough divides Cumbria into 10 topographic regions (Barrowclough 2010, 12) that highlight the level of geological and environmental diversity, in such a relatively small area. The two most important regions in this study are the central mountainous zone and the Eden Valley. Within the Central Fells, and northern regions, are found the hardest and oldest rocks-along with England's highest peaks (2010, 18). Here, the stone is mainly igneous and metamorphic rock that date to the Late Ordovician, and are 450 million years old (Moore 1992). The Borrowdale Volcanic Group is thought to be the remains of a volcanic activity, that formed as oceanic crusts were forced to move under a continental land mass (Branney 1988). Other regions of Cumbria have very different formations, with shale and sedimentary rock found to the south and east of the county -where carboniferous limestone, red sandstone and intrusions of granite dominate (Sharpe 2007a, 85). The Eden Valley is considerably different and is made up of Triassic shale and sandstone-interspersed by deep cut gorges (Barrowclough 2010, 15).

Furthermore, the region lies on the ancient fault Pennine line, along and around which most of the Neolithic monuments of the Eden Valley are found. In Figure 4.2, the close connection that the upland areas of Cumbria have with the Pennines and Yorkshire can be seen. This suggests that, topographically at least, the two regions are almost joined.

As the Cumbrian landscape continued to develop and change for millions of years, it was not until the Late Upper Palaeolithic that the first hunter-gather presence, during the Ice Age, was found. Lithic material from Kirkhead cave, South Lakeland, dates to 11,000-9500 cal. BC, and is the first evidence of human activity (Barrowclough 2010, 61). Between 11,000-8,000 cal. BC, the most significant environmental event was the fluctuation of sea levels, which would have been at a much lower level, around the Cumbrian coast, than they are today (Barrowclough 2010, 22; Tooley 1987). Hunter-gatherer groups may have moved further inland, following the retreating coastline, as sea levels rose. By the Early Mesolithic (around 8000 BC) sea levels would have been 20 m less than at present (Tooley 1974, 33). This was the case until around 5200 BC, when the levels would have been closer to what they are today.

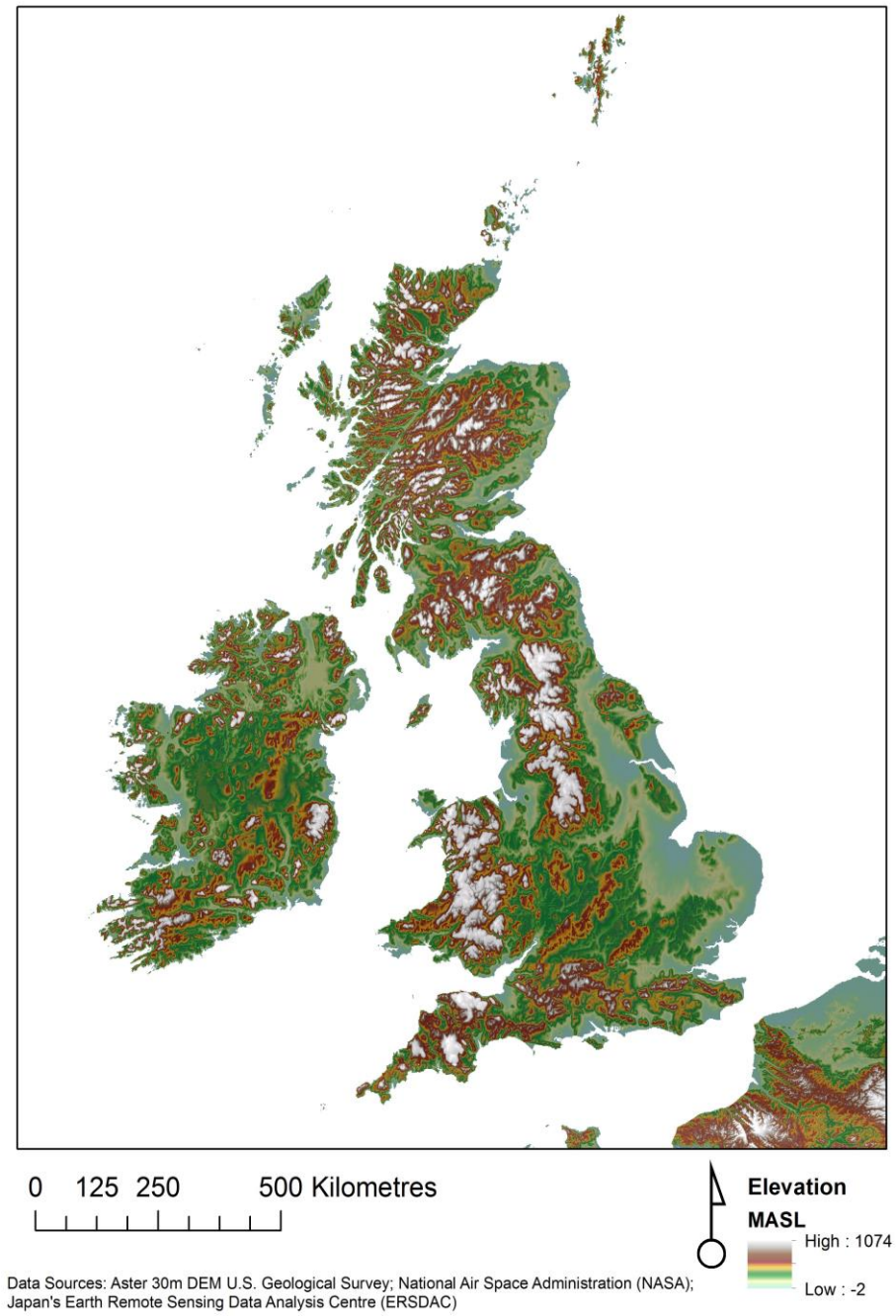


Figure 4.2 Topographic map of Britain and Ireland. Data Source: Aster 30m Dem U.S. Geological Survey; NASA; ERSDAC.

During the last Ice Age, glacial action would have created the typical glaciated U-shaped valley (seen in Figure 4.3), which radiated outwards- like the spokes of a wheel- and gave Cumbria its defining topography. By the end of the last ice age (around 10,000 BC), the climate would

have resembled a Tundra landscape, with birch colonies and some early developing deciduous woodland coves (Barrowclough 2010, 23). As temperatures improved, this vegetation was eventually replaced by hazel woodland in lower regions-with pine, towards the Later Mesolithic, in the Central Fells. In terms of fauna during the Mesolithic period, auroch, elk, red deer and wild pig would have been common in Cumbria (2010, 59), with mixed deciduous woodland becoming the climatic climax vegetation, from around 5000 cal. BC (Hodgson *et al.* 2006, 23). Aside from Elm decline, the woodland composition between 5500 and 3200 Cal. BC can be characterised as a period of mixed deciduous closed canopy forest (Evans 2004, 19). Veere (2000) has suggested that a modern, grazed 'park' like landscape shows similarities to prehistoric pollen spectra and that this, rather than closed canopy forest, is a better explanation. This suggests that many open and grazed areas may have existed in the Cumbrian landscape independent of human activity. What is known is that Cumbria had many different habitats, with elm and birch having had high concentrations in the Central Fells, and oak dominating in coastal regions. Alder would have been found along the valley floors and next to tarns, with birch and pine on more marginal and upland soils.

An issue for debate, during this period in Cumbrian prehistory, is the tree line. Pennington (1997) suggests that it may have reached about 760 meters, whilst Simmons *et al*. (1987) and Bradley & Edmonds (1993) suggest around 600 meters. Both figures are higher than any of the rock-art sites in the Central Fells, so rock-art sites must have been, to a lesser or greater extent, surrounded by tree cover. Bradley (1997; 1999; 2000) suggested the importance of visibility at rock-art site- this, however, is now questioned by Sharpe (Sharpe 2007a, 287-292). Certainly, knowledge of where rock-art sites were located would have been important; whether or not they could be seen from each other. Lower, eastern areas were dominated by limes- with plenty of open spaces (Skinner 2000). Around the coast, the presence of holly, ivy climbers and shrubs, suggests an open environment (Evans 2004, 20). Therefore, around the Late

Mesolithic/Early Neolithic transition, Cumbria had a diverse range of ecosystems that would have affected the nature of occupation (which, at the time, would have been mainly coastal).

Figure 4.3 The fells north of Great Gable, the oldest stone in Cumbria, moving towards Borrowdale, with a typical glaciated U-shaped valley often found in the central fells (photo, R. Smith).

4.1.2 Environmental sub-context II: Human-environment interaction

There is limited evidence of Upper Palaeolithic occupation in Cumbria, with bone points found at Crosby-on-Eden (Hodgson 1895) and lithic material from Kirkhead Cave (near Grange) that date to around 11,000-9500 BC (Young 2002). Elk antlers, from the site, date to 11,027-10,077 cal. BC (Gale & Hunt 1985). Upper Palaeolithic blades have been found at Lindale Low cave

(Sailsbury 1988; Hodgkinson *et al.* 2000; Barrowclough 2010, 61). Most of the Palaeolithic evidence suggests that occupation remained close to the coast, and was concerned with hunting.

Figure 4.4 Great Gable (left), Haystacks (right), Buttermere (centre) Peat formation at high altitude and treeless mountains are likely a different sight than those of the Neolithic wayfarer (Photo, R. Smith).

By the Mesolithic period, there is evidence of human-environment interaction, as pollen from plants such as *Plantago* and *Pteridium* suggest woodland clearance. The evidence comes from a number of sites: Burnfoothill Moss (Tipping 1995), Thwaite House Moss (Middleton *et al.* 1995, 187), Oulton Moss (Simmons and Innes 1987) and Bowness Common (Hodgson & Brennand 2006). All of these sites show evidence of forest clearance occuring around 6000-5000 BC (Barrowclough 2010, 62). Evidence suggests that the first occupation, on the Eden

Flood plain, took place as early as 5632 cal. BC (Evans 2004, 22). Macroscopic charcoal from north Cumbria (Hughes 1997),and the north west wetland survey, date fire disturbances occurring and becoming more common from 6080-5790 cal. BC - along with a growth of upland peat (Figure 4.4) which peaked at 5240-4940 cal. BC (Barrowclough 2010, 62; Hodgkinson et al 2000). However, one must be careful when assigning anthropogenic causality to processes that may have been natural.

The material culture from this period (although sparse) is mostly related to the making of tools with a Late Mesolithic, triangular Microlith from Carlisle, and a convex edge blade (Fell 1985) This suggests that human activity was taking place by the Late Mesolithic (Barrowclough 2010, 63), as adoptions to changing flora (the development of mixed deciduous woodlands) and fauna (smaller animals such as wild pig, cow and dear) were reflected in the Mesolithic tool kit. Barrowclough suggests that the Eskmeal area may be a possible residential site; drawing on the research by Bonsall (1981) who dates birch bark from Williamson Moss to 5555± 40 BP. Here, possible wooden house platforms suggest the beginnings of permanent settlement, or dwelling, for longer periods in the Late Mesolithic.

The transition from the Mesolithic to the Neolithic in Cumbria (around the start of the 4th millennium BC) can be seen from the pollen evidence, as open space in the woodland canopy became more common (Barrowclough 2010, 74) with an increase in cereal 'type' pollen from around 4900-4500 cal BC (Edwards & Hirons 1984). By the 4th millennium, there is evidence that, along with other regions of Western Britain and Ireland, Mesolithic life gradually became more marginalised in favour of a greater emphasis on ritual and burial activity (although the slow and adaptive nature of this transition must be emphasised; many technological features of the Mesolithic persisting, over time (Evans 2004, 126).

During the 4th millennium BC, simultaneous developments across Britain began with cereal type pollens, a decline in elm, and more evidence of clearance activity and the building of burial/ritual monuments. In Cumbria, there is evidence of cereals in the Eden valley at Howgill Castle at 4009 cal. BC and 3577 cal. BC (Skinner 2000). However, due to the lack of evidence from other sites in the limestone east of the county, this seems to have been an abnormality, as larger scale cereal cultivation did not take place here until the Late Neolithic (Skinner 2000). To the north, at Solway Moss, cereal cultivation may have begun in the Early/Middle Neolithic- with two suggested dates of 4036-3780 cal. BC and 3340-2707 cal. BC (Barrowclough 2010, 80; Huckerby & Well 1993).

The evidence, to the west and south of the Central Fells, shows elm decline beginning at 4458 cal BC, with a second episode starting at 4047 cal. BC (Evans 2004, 23). The elm decline traditionally marked the beginning of the Neolithic (Annable 1987; Bradley & Edmonds 1993; Pennington 1970; 1975) although this threshold is now generally rejected. Moreover, there is evidence for cereal cultivation in coastal regions at 3893-3381 cal. BC (Evans 2004, 23). This supports Bradley and Edmond's assertion that, in Cumbria, it is unwise to stress the period division between the Late Mesolithic and Early Neolithic (this theory is also supported by Evans (2004, 123-129)). To further complicate this issue, Early Neolithic sites generally became more ephemeral as time progressed (Bradley & Edmonds 1993, 136). Core evidence from upland tarns suggests that the formation of peat coincided with elm decline. Therefore, in Cumbria it might be prudent to divide early prehistory in to two periods; an Earlier Neolithic and a Late Neolithic/EBA period, with a transition date of around 3300 BC, as suggested by Bradley and Edmonds (1993, 157).

The earliest clearance episodes from the central fells occurred at Thorn Crag (with evidence of axe working) with dates of 4209-3709 cal. BC- from charcoal and an elm decline of 4100-4030 cal. BC (Evans 2008). Close to this site, minor clearances have been identified at Blea Tarn

from 3700 cal. BC (Pennington 1970; 1975). Core samples taken from Langdale Combe suggest four episodes of clearance had taken place before the start of peat formation, which coincided with elm decline around 3800 cal. BC (Bradley & Edmonds 1993, 139). Peat formation (although thought to have been localised (Barrowclough 2010, 19)) seems to have coincided with the elm decline, in this region. The evidence for soil erosions, also from Blea Tarn and Red Tarn (Barrowclough 2010, 19; Pennington 1964; 1975) and from Thunacar Knott (Clough 1973; Pennington 1975), suggests Late Neolithic dates for erosion episodes. The coastal evidence suggests that vegetation cover remained until the mid-third millennium BC, with Abbot Moss showing episodes of forest reduction around 3500 cal. BC- with similar dates at Moorthwaite Moss (Annable 1987, 21-2).

To summarise, the evidence suggests that after the 6th millennium BC, groups of people in Cumbria were *possibly* involved in forest clearances or, perhaps, took advantage of clearances that occurred in both upland and low lying regions, for the purposes of hunting and gathering. Late Mesolithic occupation was small scale and consisted, essentially, of hunter-gatherer groups-who gradually adapted to their changing environmental and climatic conditions by developing different material assemblages, focused mainly on microliths, with some large tools. By the 4th millennium, there is evidence from the coastal regions, and the Eden Valley, of cereal cultivation. This fits into wider Mesolithic/Neolithic transitional models that see agriculture moving along the western seaways (Garrow & Sturt 2011). The waterways around, and into, Cumbria seem to have been important as cereal pollens and clearance seem to have spread around Cumbria-along the Solway Plain, then up the River Eden. However such cultivations were small scale, at best, and do not necessarily represent a significant shift in subsistence away from hunting and gathering, during the Early Neolithic period.

4.1.3 Historical sub-context; lithics and axe exchange

As has already been seen, the environmental evidence suggests that there was an intensification of forest clearance in Cumbria (along with an increase in cereal type pollen) in the centuries before the 4th millennium BC. By 3800 BC, there began to be significant changes in material culture as well. The 'British Neolithic package', as it is known, consisted of leaf shaped arrowheads and polished stone axes, along with pottery. Pottery finds are poorly represented in Cumbria due to the possibility of continued mobile occupation and the wet, humid conditions of the Cumbrian climate (Barrowclough 2007; Barrowclough 2010, 75). However, during the Neolithic in Cumbria, rather than a 'package' arriving all at once, the overall evidence suggest changes in material culture occurring more at a protected pace, with many elements of the Mesolithic remaining.

The lithic evidence shows that established communities used coastal resources and developed a highly specialised microlithic technology during, the Mesolithic. As the Mesolithic began to turn into the Neolithic, the quality of microlithic technology declined. This point should not be overstated, as in Cumbria a continuation of flint working styles from the Mesolithic, into the Neolithic, can be identified. Cumbrian sites often contain both Mesolithic flint works, along with Neolithic artefacts (Cherry & Cherry 1987). A big change during the Neolithic was the utilisation of extra regional flint, along with the use of tuff or flint technologies, from outside the region (Barrowclough 2010, 74). The search for flint and the emergence of Neolithic exchange networks (with other regions that had flint) for example, in Yorkshire, suggests a possible motivation for the movement into the central Cumbrian massif, as people may have needed some to be able to exchange. Prior to 4000 BC, flint production, and possibly occupation, would have remained close to the coast and river estuaries, as Cumbria is entirely absent of flint (except for flint pebbles and tuff that can be found in rivers). The beginning of the 4th millennium BC saw increasing use of non-local flint, which would suggest that either

Cumbrian groups were going to other regions to collect flint, or that (as suggested by Sharpe) the Eden Valley became an important centre for the exchange of Yorkshire Tuff (Sharpe 2007a, 390). However, Middleton (1996) and Barrowclough (2010) suggest that the range of raw materials used for flint became more restricted, as Pendleside chert is no longer found after 4000 BC.

These developments may have stimulated polished stone axe production. The smoothed and polished stones (Figure 4.5) are thought to have originated from stone quarried at Great Langdale, with processing sites located around the county (especially the south), on the coasts and in the Eden Valley. The earlier phases of production may be linked to southern and western polishing and depositional sites- whilst later production and, more importantly, exchange, seems to have taken place more towards the Eden Valley. The axe production reached its peak by the end of the 4th millennium BC in Cumbria (Barrowclough 2010, 93). Furthermore like the similar 'axe factories' in North Wales and Cornwall, the finished axes can be found many hundreds of miles away from their original source. Most of these are single finds, on high ground and above either a peat moss or a river. The wetland location of most finds, along with evidence from other regions, suggest a ritual pattern of axe deposition- rather than simply being chance finds of domestic settlements or production (Barrowclough 2010, 83).

Another important aspect of the polished stone axes is their role in establishing wider Neolithic exchange networks. Axe exchange and rock-art will be investigated in more detail in chapter 8, but, here, the focus will be on the historical build up to axe production. As the Neolithic began, transitional Mesolithic-Neolithic groups seem to have moved further inland towards the Central Fells. Bradley and Edmonds show that tuff was being used as a flint substitute in the late Mesolithic and thus its collection would have been as small pebbles that would have been transported from its origins in the Central Fells, to the coastal areas (Bradley & Edmonds 1993, 141-142). This means that communities on the south coast during the Late Mesolithic/Early

Neolithic could have followed the ‘trail’ of tuff to its source at Langdale, Dungeon Ghyll, Troughton Beck, South Scree, Loft Crag, Scarfell Pike and Glaramara. This is one possible explanation for the beginnings of greenstone quarrying, in central Lakeland.

Looking at axe production in more detail, the collection of stone has two phases- an earlier and a later phase. The first phase consisted of a more *ad hoc* collection of stone from Langdale, where it was moved to processing sites between 12 and 20km away (Bradley & Edmonds 1993, 144). The best evidence of this initial processing comes from the site of Ehenside Tarn, on the west coast (Darbishire 1873; Barrowclough 2010, 91). The second and latter stages of production seem to be more organised, with less waste, and are centred at the quarrying sites to the east-with possible connections to ritual monuments of the Eden Valley. In contrast, Dungeon Ghyll, shows how, during the earlier period of axe working, the process was less specialised, and that it was not until the second phase, that a degree of proficiency developed (Bradley & Edmonds 1993, 91).

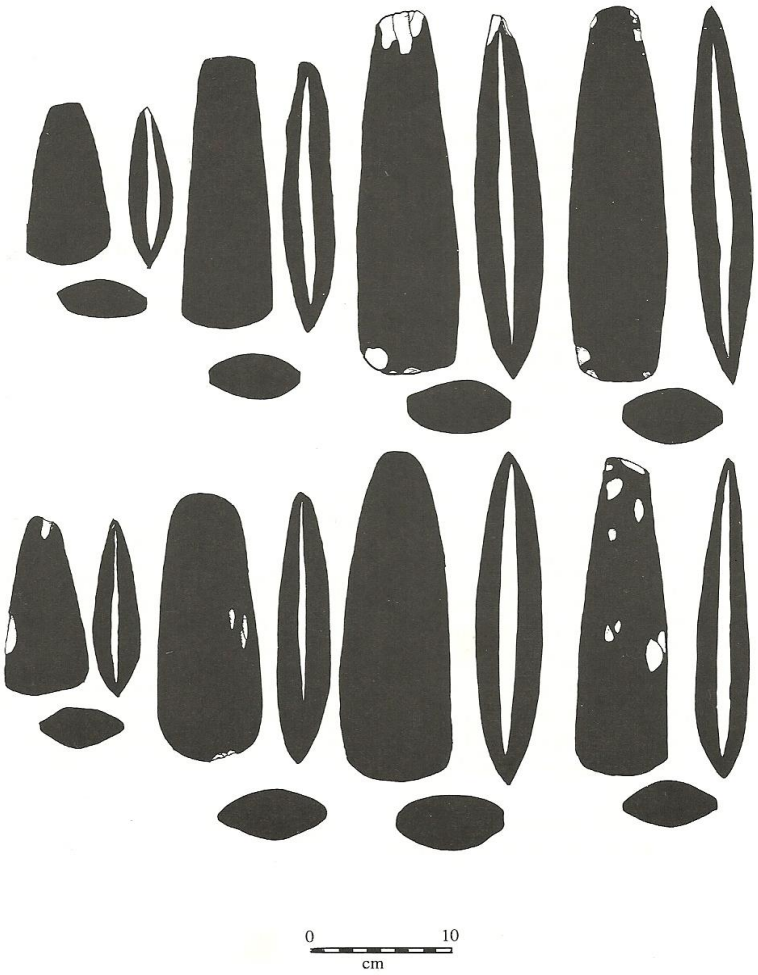


Figure 4.5 Cumbrian stone axes from North West England (Bradley & Edmonds 1993, Figure 7.8).

4.1.4 Summary

The historical evidence concerning the environmental and material cultural evidence shows us that once communities and groups of people began to inhabit Cumbria, on a more permanent basis, they began to change their surroundings by altering the landscape and the stone that it contained. Barrowclough suggests that Mesolithic modes of seasonality, between the lowlands and uplands, seemed to have continued in Cumbria until, possibly, the Later Neolithic period (Barrowclough 2010, 103). In the lower regions there is evidence of farming and agriculture around the coast and up the River Eden, with small-scale clearances. The remote uplands would, possibly, have continued to be used as hunting regions, with a new development in

stone quarrying. Finally, hunting along, and in, the forested uplands is evident by the distribution of Neolithic arrowheads in the Central Cumbrian uplands (Barrowclough 2010, 103). This may have been considered a symbolic and ritual act away from the everyday activities, at lower levels (Bradley 2000, 87). Thus, the symbolism and ritual connected to the hunting of animals may have been also connected to the 'hunting' for stone.

4.2. Rock-art sub-context: current interpretations of Cumbrian rock-art

4.2.1 Introduction

Compared with other regions, Cumbrian rock-art has not been extensively researched. To the north and east there exist many more, complex rock-art sites- in Northumberland and Co. Durham- and, as a result, they have been more intensively researched regions. The current understanding of rock-art in Cumbria comes from four main sources: Bradley (1997), Beckensall (2002), Sharpe (2007a; 2007b) and Barrowclough (2010). Bradley's (1997) research does not deal with Cumbria specifically, but introduces Cumbrian rock-art to a wider audience- as part of a wider tradition of Atlantic rock-art. Beckensall's (2002) recording of rock-art sites in Cumbria has provided an invaluable record of the rock-art found within Cumbria. Sharpe (2007), following in the footsteps of Bradley (1997; 2000), has attempted to understand rock-art using a landscape methodology, whilst Barrowclough (2010) (who deals with the whole of prehistoric Cumbria) discusses the type of stone that the rock-art was created on, and some of the symbolic meanings that this may have had.

4.2.2 Previous approaches to rock-art in Cumbria

Bradley (1997) makes a number of specific references to Cumbria throughout his research into the western prehistoric rock-art tradition. When dealing with the spiral motifs of the Boyne Valley, Ireland, Bradley shows that this tradition is also found across the Irish Sea in western areas of Britain. Cumbria contains a large number of spiral motifs, on stones, within monumental complexes; Long Meg, Little Meg, Glassonby and Castlerigg. Furthermore, the

destroyed sites of Kirkoswald and Mayburgh may have shared similar idiosyncratic motifs with sites in Ireland (1997, 113-114). Bradley shows that in order to understand not only the developments in rock-art, but also the wider Neolithic, one cannot ignore Irish influences in Cumbria. Developing the idea of the 'public art' of the Boyne Valley, Bradley shows how such art types (decorated carved stones found in Passage Graves in Ireland) may have created thresholds, or that open air rock-art- and Irish megalithic styles- may be a reflection of designs that show similarities to those found on Grooved Ware pottery (Bradley 1997, 64).

Figure 4.6 Long Meg and the Eden Valley Landscape (Retrieved from www.heritageaction .files.wordpress.com/2012/10/longmegbriankerr2.jpg*) [Accessed on 5th February 2014].*

Moving away from Cumbria's wider Irish Sea connections, Bradley discusses the rock-art's relationship to the landscape. There appear to be few similarities between the landscape position of rock-art in the central fells, compared with the positioning of rock-art in the eastern regions of the Pennines, or in Northumberland (Bradley 1997). Cumbrian cup marked rock-art tends to be found on landscape entrances of the central fells, at a height of no more than 250m- close to the valley floor. Thus, the cup and line marked rocky outcrops- on the entrances to the

central fells- can be considered a defining characteristic of Cumbrian rock-art. This cup and line, as opposed to the cup and ring style of other regions, is significant and will be discussed further, in relation to discourses, in chapter 5.

Moving on, Beckensall's (2002) main focus is the recording of rock-art sites with minimal interpretation or wider conclusions *vis–à–vis* associations of the rock-art with material culture, or Neolithic monuments. Although Beckensall's focus is on discovery and documentation of the rock-art, he does allow for some interpretation as to how and why rock-art existed in prehistoric Cumbria. Beckensall suggests 'that marked rocks follow a route way that also provides a good viewpoint up and down the valley that would have been the most obvious path through the mountains, and a link with the rich fishing and hunting grounds' (2002, 32). Here, Beckensall connects Cumbrian rock-art to the idea that it was located on prehistoric route ways into the landscape- an idea also covered by Bradley (1991; 1997).

The main patterns of Cumbrian rock-art are that cups and swirls are never found together, with mostly cups being found in a landscape context. Secondly, swirls are nearly always found with rings, penannulars and half ovoid motifs. This is a reflection of a more 'complex' series of rock carvings that are found mostly in monumental contexts. It is significant that swirls seem to be found with more complicated patterns and motifs - this represents a 'passage grave' tradition, and is found elsewhere around the Irish Sea. On the other hand, cup and line styles are found in the Central Fells and seem to differ from the more common 'cup and ring' styles, for example, of the Pennines and Cheviot.

Moving away from recording and back to landscapes, Sharpe's (2007) work is a detailed investigation of Cumbria's rock-art, and its relationship with the landscape. The landscape setting of rock-art, in the county, can be divided into two main regions; that of the central fells and its rocky outcrops, and an easterly Eden valley monumental style. In terms of the central fells style, Sharpe has noted that sites were not chosen for their remoteness, as they are

generally low lying, accessible and close to water (2007, 285). More specifically, all are within 1km of a lake and are close to the beck that feeds the lake. Furthermore, they are, unsurprisingly, surrounded by mountains, and lie between 9-18 km from the central Cumbrian massif and the outlying fells.

The other major rock-art style dealt with by Sharpe, is that found along the Eden Valley to the east of the cup marked outcrop zone. Although not explicitly stated, Sharpe suggests that the first monuments established in this region-towards the late 4th millennium BC- reflect an east-west dynamic (Figure 4.7) in Cumbria, since monumental types (henges, stone circles, stone avenues and enclosures) reflect both western Irish Sea and East Pennine traditions in the Eden valley (2007, 393). This is reflected in the nature of the rock-art here as 'the carvings on megaliths, kerbstones, standing stones and slab walls share passage grave affinities' (2007, 389).

In terms of the wider archaeological narrative, Sharpe suggests that the Central Fells traditions have certain Irish Sea and wider Atlantic affinities (also suggested by Bradley (1997)). Sharpe specifically suggests a parallel between the central Cumbrian tradition and that of Loch Tay in Perthshire (although, whilst this region is not that close the Irish Sea, it still may have had cultural connections). On the other hand, Sharpe also considers the internal dynamics of cup marked stones, suggesting that the making, or marking, of 'place' within 'space' cultured the landscape. Thus, the stone panels could have acted as a kind of proto-monument, or pre-Neolithic megalith (see also Bradley 1998; Scarre 2002; Sherratt 1990; Tilley 1996a)

Sharpe then considers the rock-art of the Eden Valley, which is located on monuments and created some time after the initial movements of stone axes (suggested by Sharpe to have been around the late 4th millennium BC) by people approaching Great Langdale from the east (2007, 393). Furthermore, during the later 4th millennium and into the 3rd millennium BC, the movement and production of stone axes had become more organised, suggesting that the

monuments and their rock-art functioned as part of a well established exchange network, seen in Figure 4.7. Thus, places like Copt Howe in Great Langdale- whose design is reminiscent of the Megalithic art of the wider Irish Sea- may have given the carvers a level of prestige at being connected to a wider Neolithic world.

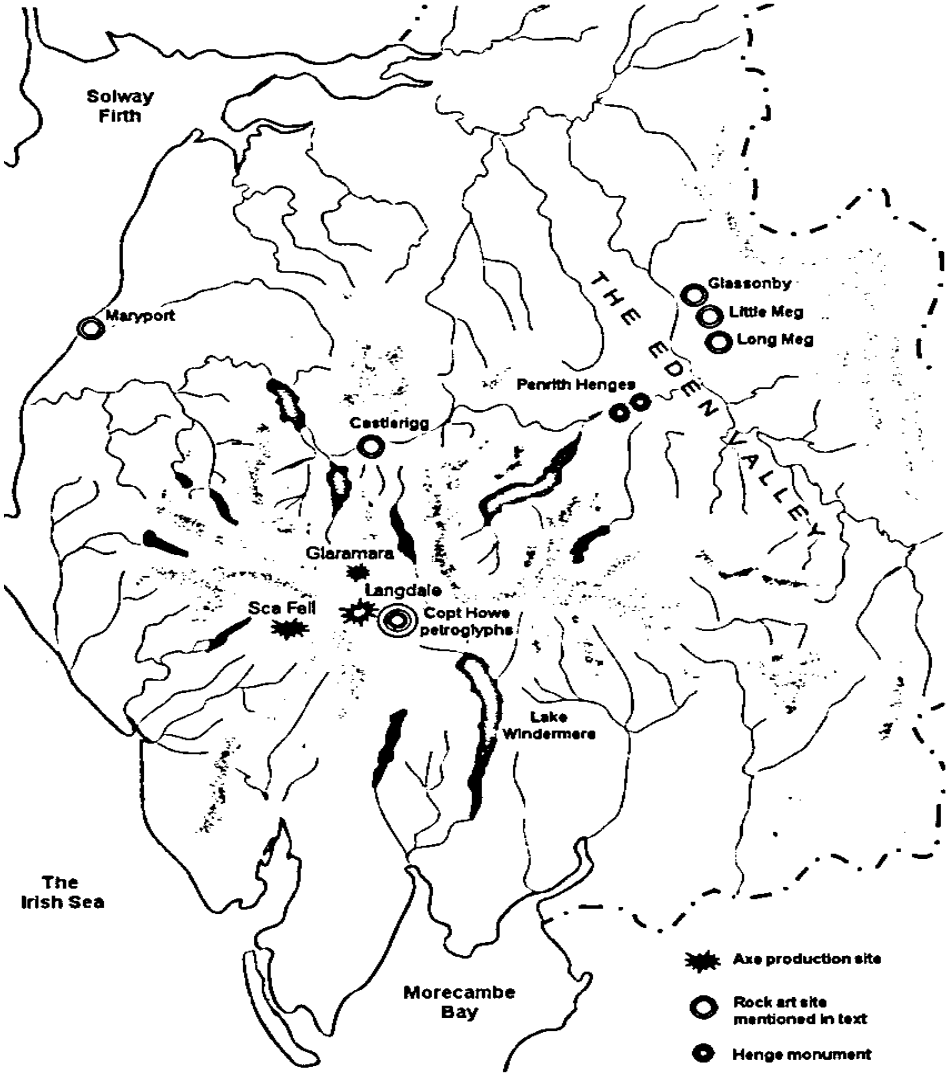


Figure 4.7 Axe production sites and their relationship to some monumental rock-art sites in Cumbria (Sharpe 2008, Figure 1).

Looking at just one site-Copt Howe- Sharpe (2007b) suggests that some of the motifs may mimic large-scale topographic features. In a sense, the rock-art motifs are a condensing of the wider landscape and topographic features, in the rock-art narrative. Sharpe also suggests that

the rock-art at Copt Howe is a representation of the movement of the sun across Harrison Stickle. This is a suggestion that begins to question the idea that all British rock-art is abstract and may have had a representational purpose.

Finally, Barrowclough (2010) reiterates many of the ideas of the previous three authors; that the rock-art was located along movements into and out of the landscape, towards and away from the axe quarry sites of the central fells. Barrowclough cements his understanding firmly in the landscape framework by suggesting that 'the practice of decorating the landscape was therefore a means of ordering the landscape and orienting the individual within' (2010, 138). Barrowclough makes some interesting observations (drawing on Bradley 2000, 126-8) regarding the colour of stone used within a monumental context- such as at Castlerigg. Unfortunately, he fails to extend these observations to other non-stone circle rock-art sites.

4.2.3 Summary

Current understandings of rock-art in Cumbria, like the rest of Britain, are firmly rooted in the landscape. The fairly unique characteristic of the Cumbrian landscape means that wider landscape comparison- with other British and Irish regions- is not productive. On the other hand, the location of the rock-art sites in the Central Fells shows us that movement into and out of this region, along the radial valleys, was very important. In an attempt to extend the landscape methodology, Sharpe has, in some ways, attempted to internalise the 'landscape' into the rock-art itself, by suggesting that the motifs at Copt Howe may have been a reflection of the sun's movement across the mountains.

Another dynamic is the relationship that the rock-art has with other regions. The influence of Irish Passage Grave motifs, on the monumental art, seems significant. Passage Graves are known to have an earlier Neolithic date to the south in Iberia. By the time they reach Ireland they seem to be dated around the Middle/Late Neolithic (Nash 2006: 210). By the time this

style of art reaches Cumbria, it can be assumed that it is Late Neolithic,-perhaps continuing into the EBA. The Passage Grave style found in the Eden Valley, within monumental contexts that are Late Neolithic and EBA, supports this. This, however, leaves the question open as to the dating of the art in the Central Fells, found in open-air contexts. The cup and line style of Cumbria differs from the cup and rings to the east and along the Atlantic. Given its naturalism and association with the axe quarries, it can be assumed that this art is perhaps Early Neolithic. Thus, it may be (tentatively) suggested that there is a chronological development of style and form with central Cumbrian cup and line art- being older than that found on monuments. This dynamic will be explored, in more detail, in chapter 5.

Finally, it is felt two key issues have not been addressed in relation to the art in Cumbria; firstly, the relationship between natural fissures/scarring and the rock-art that is often placed purposely within- and secondly, what basic motifs and design forms can be identified and how they are arranged to create meaning (in essence, what the structure of the art is). These two issues are intimately connected and will be explored in the next section.

4.3 Cumbrian rock-art

4.3.1 Natural origins of Cumbrian rock-art

Before quantifying the rock-art, it is important to define what exactly 'rock-art' in Cumbria is. In Cumbria, specifically, there are issues surrounding where one motif ends and another begins. This is problematic, when attempting to research the art. The issue of whether the origin of Cumbrian rock-art is either natural or cultural, is especially important, as this question is perhaps more significant in Cumbria, as the type of art found here is (especially in the Central fells) simple and naturalistic (as shown in Figure 4.8).

Figure 4.8 Montage of natural rock-art west of the Patterdale complex, up the valley heading towards Helvellyn. Such cup and lines may have been the inspiration behind the cup markings, 1km to the east of here (Photos, R. Smith).

Sharpe (2007) defines Cumbrian rock-art to be those motifs of human origin. As a result of her investigation, only 37 of the 76 identified panels of Cumbrian rock-art (less than 50%) were confirmed to be prehistoric rock carvings, with any certainty (Sharpe 2007a, 192). This highlights a fundamental problem for the understanding of rock-art, and how to investigate it when so much potential 'evidence' is ignored.

Haszeldine and Haszeldine's (2003) investigation into Cumbrian rock-art, from a geological perspective, showed that some of the earliest rock-art sites in the region could, in fact, be natural. They suggest that whilst the majority of rock carvings in Cumbria, and around the British Isles, were undoubtedly created by people, some 'cup marks' (Figure 4.9) are, in fact, natural features of geological processes and natural weathering. Such persuasive arguments have highlighted major difficulties in the understanding of Cumbrian, and wider British, Neolithic rock-art. There is a possibility that researchers have been too quick to dismiss the natural and geological from their research, since it was possibly the inspiration for abstract art forms.

Figure 4.9 Natural rock-art from Cumbria, showing the difficulty in identify human agency or natural actions (Haszeldine & Haszeldine 2003, Figure 7).

As a result, it is suggested that there are three possible categories that Cumbrian rock-art may be placed in. Type A; rock-art that is natural; cups and radial lines that are the result of weather action, or motifs on the rock that are of geological origin and millions of years old. Type B; rock-art where natural elements may have been incorporated into human art work- for example, by extending lines, circling cups or using the natural motifs on rock faces. Type C; rock-art that's motifs and designs are wholly of human origin. The ratios of these groups will differ depending on which British region is investigated, but in Cumbria, it is suggested that most art is either type B or type C.

4.3.2 Quantitative analysis of Cumbrian rock-art

The following analysis was conducted using Beckensall's (2002) gazetteer of Cumbrian rock-art. Firstly the images were scanned and reproduced in CorelDraw before the rock-art was quantified. The naturalness of Cumbrian rock-art means that defining what is natural or cultural is difficult. This is further exacerbated by Beckensall's often ambiguous recording of natural or cultural motifs, often drawing them both together. However it would be a mistake to sharply divide the two, as both seem to have been of equal importance to the carvers.

The Cumbrian dataset represents 21.5% of the total number of known rock-art panels in Britain (Sharpe 2007a). Only 25% of Cumbrian rock-art carvings are found in landscape positions, with the other 75% either on monument, isolated portable rock- or in museums and private collections. A number of Cumbrian sites have been omitted from this research; Old Parks, Broomrigg, Redhills, Moot Divock Ring Cairn, Hardendale circle cairn, Shape Avenue, Giants Grave, Ash House, Hugill, Castle Folds, North Stainmore, Ruckcroft, Stag Stone farm stone, Honey Potts Farm, Ewanrigg and Dean/Maryport. The main for these omissions is largely because of their simplistic nature, or the fact that they have a very small number of motifs (often just one or two). In this analysis, significance is placed on the interaction between multiple design elements, and thus, their inclusion would be pointless. A second point is that most are found on portable or isolated stones, which makes it difficult to integrate these sites into the general Central Fells/North or Eastern Cumbria division of sites, shown in Figure 4.10.

Figure 4.10 Map of rock-art sites in Cumbria and the rough division between Eastern Cumbria and the Central Fells/North region described in this text. (Beckensall 2002, Figure 8).

4.3.2.1 Quantitative analysis I: Central Fells/North region

The rock-art of the Central Fells/North (with the exception of one site that will be discussed in isolation) shares a number of stylistic features that differentiates it from the rock-art style of Eastern Cumbria. Due to the large size (in terms of motifs) of some of the rock-art sites in this region, individual sites were divided into a number of zones; these will be referred to as 'complicated sites'. The terms simple and complex, here, denotes number of motifs per site, rather than referring to any complexity or simplicity of the motifs themselves. The three Patterdale sites, therefore, have been dealt with separately, because of their size and complicated artwork (despite their simple motif repertoire). The seven smaller sites are dealt with as 'simple sites'.

Group A (in table 4.1) shows a line or grove motif, or a natural line. As already stated, no differentiation was made between natural and cultural lines when they formed part of the artwork's composition. Group B represents the opposite design classification of the linear groove- the circle or cup class. There is a general tendency to view cup marks as a single category but,it is suggested here, that, in fact, Cumbria has four cup types from left to right; small, medium, large and cup in cup. Group C is the classification of a motif style, which, to a certain extent, falls somewhere between the motifs in the first (lines) and second (cups) classes- as this motif class is a combination of both linear grooves and circular cups. Thus, it is termed the intermediate class. Group D contains a design class that forms the basis of many rock-art compositions of the Central Fells/North- cups/circles with lines going into/coming out of the motif. This motif type was further subdivided into one, two and three lines entering or leaving the cup.

Table 4.1 Classification schemas for the central fell Cumbrian rock-art.

The lines in the Central Fells/North rock-art were then divided into cultural and natural, whereas cups were treated as either being small, medium or large size types. This classification may be termed a *site relative* motif type classification. This means those small, medium and large measurements are not actual objective measurements, but are a relative judgment based on the size of cups, at the site being investigated. Thus, the smallest cups were defined by their relationship to the biggest cups. Any cups which then fell between the smallest cups (of similar size) and the largest cups (of similar size,) are classed as medium cup motifs. Naturally, this means that what is a small cup or a large cup will vary from site to site, and thus small, medium or large is not quantifiable. Table 1 shows the actual numbers of motifs for each site and zone, and the averages of both complicated (upper half) and simple (lower half) sites- as well as an overall average of motifs per site/zone.

4.3.2.2 Analysis of Central Fells/North rock-art

Table 4.2 shows how quantitatively small and medium cups dominate complicated sites whilst only medium cups are found in large quantities on simpler sites. Both complicated and simple sites have similar amounts of natural and cultural lines, which show that linear elements form an important basis of these sites. The linear cup motifs have a smaller average value at simple sites, in comparison with complicated sites. The amount of cups with lines is similar for simple and complicated sites. All the sites show that cups, on their own, form the basis of the rock-art.

However, the main difference is that complicated sites have a greater average of small and large cups, with the medium size cups, in both simple and complex sites, being nearly the same. Medium cups, cups with one line, cups with two lines and cups within cups, all show similar amounts per site/zone- despite the fact they are found in different locations. This suggests that although they were carved in different locations, the same underlying grammar can still be identified.

Site	Line		Cup			linear cup	cup + 1 line	cup + 2 lines	cup in cup
	cultural	*natural*	*small*	*medium*	*large*				
Patterdale 1									
Zone A	0	6	12	12	0	3	0	0	0
Zone B	1	0	23	11	6	2	4	6	4
Zone C	4	0	3	4	0	0	0	0	0
Patterdale 2									
Zone A	3	2	25	4	19	0	1	2	0
Zone B	15	4	53	6	41	3	4	0	0
Zone C	6	4	39	40	8	4	8	2	1
Patterdale 3									
Zone A	0	4	8	12	9	3	4	1	0
Zone B	0	14	6	6	3	2	7	0	3
Zone C	2	1	3	18	9	14	1	2	0
average/zone	**3.44**	**3.89**	**19.11**	**12.56**	**10.56**	**3.44**	**3.22**	**1.44**	**0.89**
Beckstones	1	0	6	22	9	0	2	0	0
Tortie 1	0	3	9	9	3	0	9	3	4
Tortie 2	6	4	5	35	0	1	5	0	1
Gillalees 1	0	1	1	0	1	0	2	0	1
Gillalees 2	0	2	0	15	10	0	0	0	0
Gillalees 3	0	2	0	4	0	0	1	1	0
Gillalees 4	0	0	0	2	1	0	0	0	0
average/site	**1**	**1.71**	**3**	**12.43**	**3.43**	**0.14**	**2.71**	**0.57**	**0.86**
overall avg	**2.38**	**2.94**	**12.06**	**12.5**	**7.44**	**2**	**3**	**1.06**	**0.88**

Table 4.2 Number of Motifs per Site/Zone for central fells/north region. Patterdale 1, 2 and 3 are complex, the rest are simple sites.

Figure 4.11 shows the average number of design types per site/zone. This graph demonstrates that the amount of natural and cultural lines is similar for both types of designs. This may be explained as an attempt by the artist/s to match the natural lines with their own creations. This suggests a desire to create lines on the rock, in relation to those natural lines that already exist. Furthermore, small and medium cups show another correlation- with larger cups being less common. Finally, linear cups, the cup and line motif, and the various other cup and line motifs, show a similar prevalence-being far less numerous compared with cup motifs. Thus, there are three main motif groups; linear, cup and mixed. Average numbers of motifs per site/zone appear to be similar within these three motif groups.

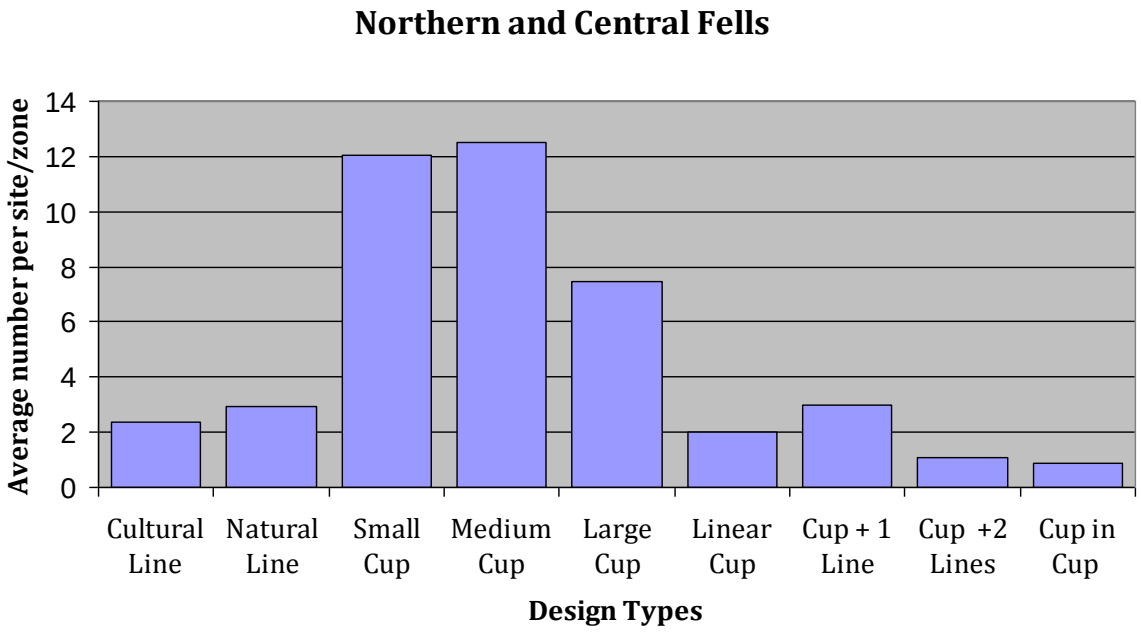


Figure 4.11 The average number of designs per site/zone in the central fells/north.

These three main design groups are further demonstrated in Figure 4.12, which shows how the average values (including the simple, complicated and combined totals) are similar throughout all sites. The distribution of the three cups motifs (small, medium and large) suggests that medium sized cups have an equal quantity across both complicated and simple sites, whereas

the average values for small and large cups differ between simple and complicated sites. The third motif group-the 'combined group'- again shows a similarity in numbers. The cup and line, and the linear cup motif are mostly found on complicated sites, whilst the remaining values of the other cup and line motifs- as well as cup in cup motifs- are similar for complicated and simple sites.

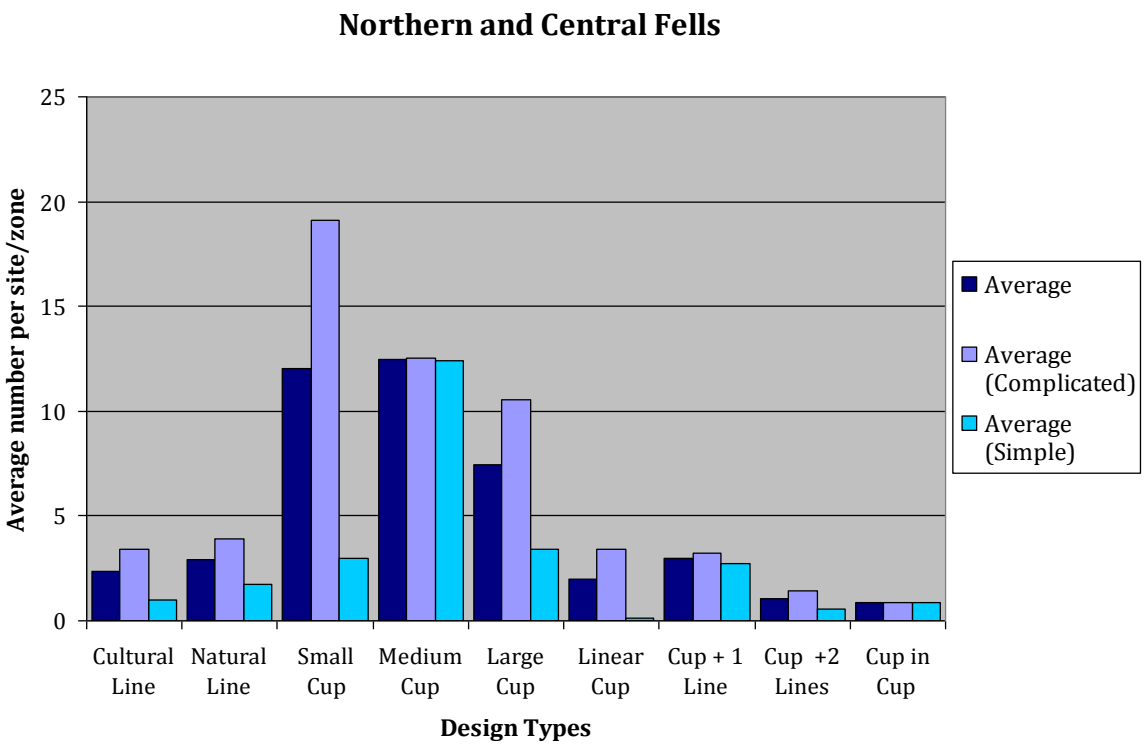


Figure 4.12 Average number of design types per site/zone in the Central Fell and North, with overall average values as well as averages for simple and complex sites separately.

Therefore, the rock-art tradition of the Central Fells/North may be characterised as based on three design groups; linear, circular, and a combination of the two. There seems to have been a desire to match the number of cultural lines to the number of natural lines; this suggests that there is a close relationship between the two. Medium cups are found in equally large numbers but the smaller and larger cups are less prevalent at simple sites, compared with complicated

sites. The combined motif types (one cup + one/two line motifs) are found in higher numbers at complicated sites. The significance of these findings will only become apparent in relation to the rock-art tradition of Eastern Cumbria.

4.3.3 Quantitative analysis II: Eastern Cumbria

The rock-art of Eastern Cumbria differs from that of the Central Fells/North, for many reasons. Firstly, it is not found in a landscape position but within monumental contexts and is probably later. Secondly, the designs are more complex (in terms of their motif repertoire) and more recognisable as human creations, compared to the naturalistic rock-art styles of Central Cumbria.

The classification of the motif types in Eastern Cumbria (figure 4.13) share some similarities with the motif types in the Central Fells/North, but, importantly, there also are a number of differences. There are motif types which occur in this region that are not found in the Central Fells/North zone; i.e. cup and rings, spirals, chevron/chevron heavy peaks, square/diamonds and half rings, are only found in the Eastern regions of Cumbria, and on monumental or portable settings. However, the cultural/natural lines and the cup marking tradition still show that this region is part of a wider Cumbrian art tradition. Again, the sites have been divided into complicated and simple, when carving surfaces are too complex to be treated as a whole.

Figure 4.13 Classification schemas for the Eastern Cumbrian rock-art.

The sites in the Eastern Cumbrian region show a greater variation in number and design types, than the sites in the Central Fells/North (expressed quantitatively in table 4.3). Half–ring designs are the most common design elements at the complicated zone, whereas natural lines are the most common design type at the simple sites. Thus, the natural scarring of the carving surface must have played an important part in the selection. Small cups also seem to have been important design elements- at both complicated and simple site/s. The overall range of motif types is greater for simple sites than for complicated zones, and this suggests that whilst Long Meg is complex (in terms of its number of zones), the range of design elements is narrower, when compared with simple sites.

Site	**Line**		**Cup**		**Cup+rings/ multi ring**	**Spiral**	**chevron**	**chevron heavy peak**	**square/ diamond**	**half ring**
	cultural	*natural*	*small*	*medium*						
Long Meg (LM)										
Zone A	0	2	3	0	1	1	0	0	0	3
Zone B	2	4	0	0	2	2	0	0	0	11
Zone C	9	1	11	0	2	2	0	0	0	5
average/zone	**3.67**	**2.33**	**4.67**	**0**	**1.67**	**1.67**	**0**	**0**	**0**	**6.33**
Fallen stone 5 (*LM*)	3	3	3	0	0	0	0	0	0	2
Fallen stone 6 (*LM*)	5	0	2	0	1	0	0	0	1	0
Fallen stone 7 (*LM*)	3	3	0	0	0	1	0	0	0	3
Castlerigg circle	0	3	1	0	0	1	0	0	2	1
Little meg	0	5	6	0	1	2	0	0	0	0
Little Meg cist stones	0	0	3	2	0	0	0	0	0	6
Glassonby circle	0	1	2	0	1	0	3	4	1	3
average/ site	**1.57**	**10.7**	**2.43**	**0.29**	**0.43**	**0.57**	**0.43**	**0.57**	**0.57**	**2.14**
overall average	**2.2**	**2.2**	**3.1**	**0.2**	**0.8**	**0.9**	**0.3**	**0.4**	**0.4**	**3.4**

Table 4.3 Number of Motifs per Site/Zone in Eastern Cumbria. Long Meg is a complex site, whilst the rest are simplistic sites.

Figure 4.14 shows the total average number of motifs found on sites in Eastern Cumbria. Both line types and small cups dominate together with half ring motifs, whilst the other motif types are fewer in number. The basic design elements of Central Fells/North rock-art (i.e. the line and cup design types) have been reproduced in the east. However, the unique motif types of the east-which are mostly found in monumental settings- show that this region is defining and differentiating itself from the rock-art tradition of the Central Fells/North.

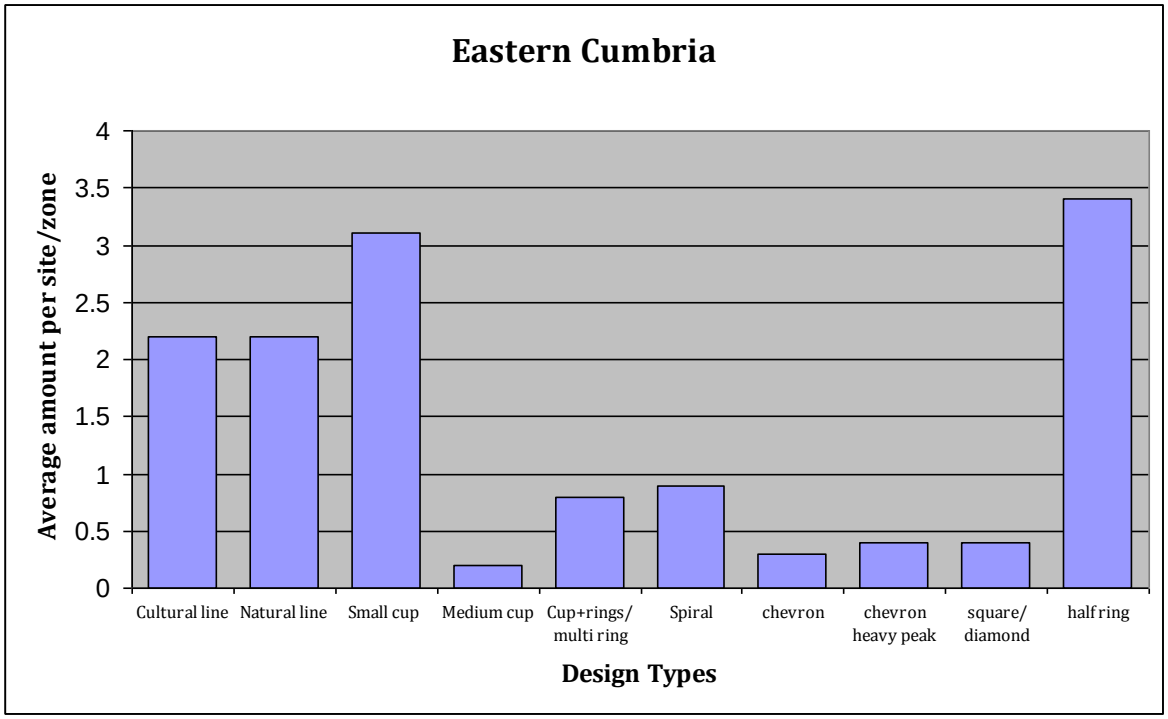


Figure 4.14 The average number of designs per site/zone in Eastern Cumbria.

As can be seen in Figure 4.15, cultural and natural lines show a reverse in numbers,-when comparing to simple and complicated sites/zones- with cultural lines being found more in complicated zones, whilst natural lines are found more on simple sites. Small cups and half-ring motifs are found more on complicated zones, although the figures at simple sites are still substantial. The complicated zones show no medium cups, chevron light/heavy pick and square/diamond motifs. Again, the simple sites have a wider variety of motif types, despite their smaller total number of motifs. At the complicated site, cup and ring and spiral motifs

have a higher value than at the simple sites. Finally, the half ring motifs are found in both simple and complicated sites/zones and it is suggested that the half, or incomplete motif type, may have an important symbolic function within this region.

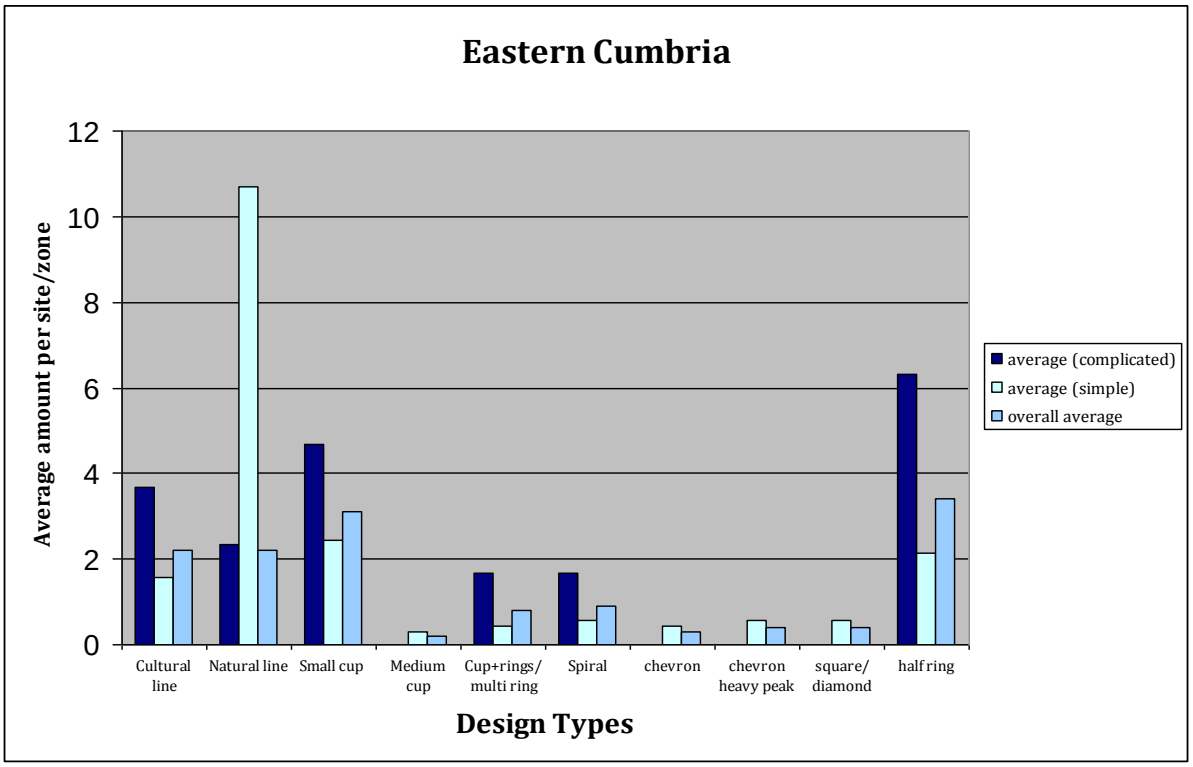


Figure 4.15 Average number of design types per site/zone in Eastern Cumbria, with overall average values as well as averages for simple and complex site/s separately.

4.3.4 Comparison between the Central Fells/North Cumbrian region and the Eastern Cumbrian region

Figure 4.16 shows the average number of designs found on rock-art sites in the Central Fells/North region, in comparison with Eastern Cumbria. The average number of designs per zone/site is generally higher for the central regions, than for eastern regions.

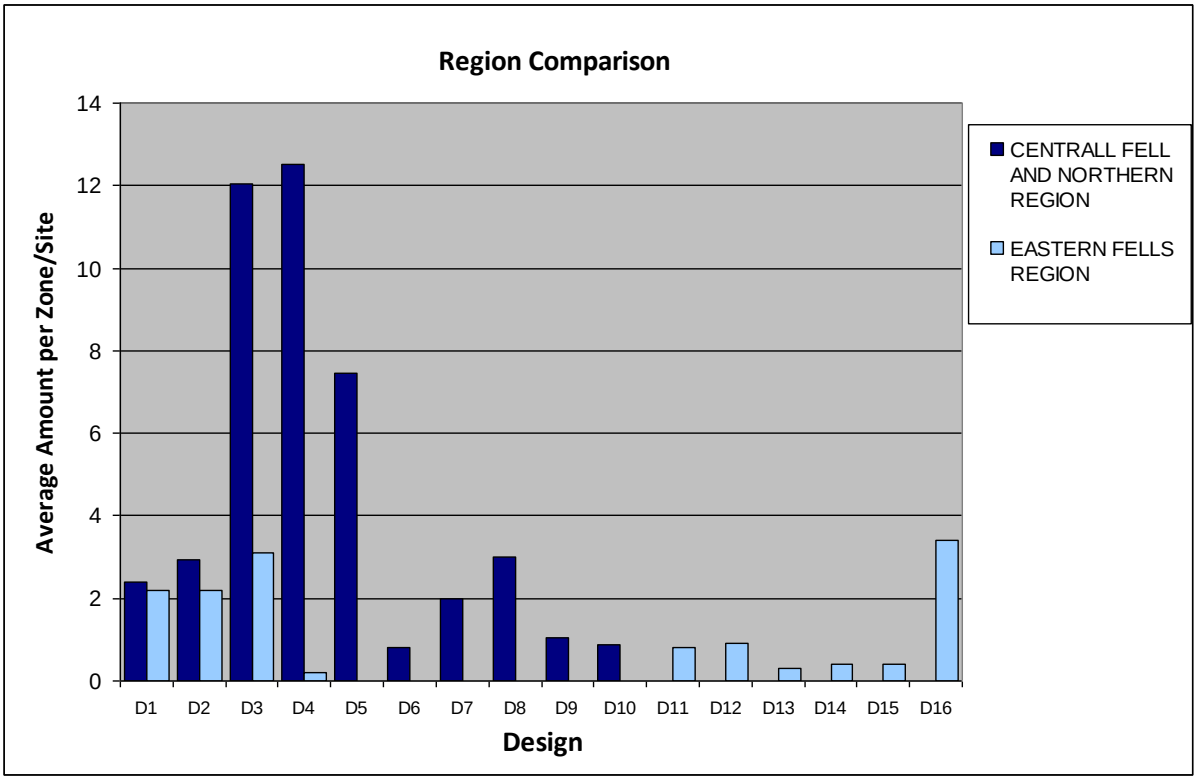


Figure 4.16 Average number of motif types per zone/site for the central fell region and the Eastern Fells region.

Key – Designs

D1	Cultural Line	D9	Cup with two joining line
D2	Natural Line	D10	Cup within cup
D3	Small Cup	D11	Cup with rings/multi ring
D4	Medium Cup	D12	Spiral
D5	Large Cup	D13	Chevron light peak
D6	Cup and Line	D14	Chevron heavy peak
D7	Linear Cup	D15	Square/diamond
D8	Cup with one joining line	D16	Half ring

The two regions share a similar basic design element that consists of natural and cultural lines. This motif class forms the basis upon which the two traditions were created. However, beyond this basic type, the design elements vary greatly. Small, medium and large cups dominate the central regions, whilst only small cups are found in any significant numbers in the Eastern regions. Designs that combine both line and cup/circles (i.e. D6 to D10) are found only in the central regions. These motif types have not been identified previously, and this new classification shows how combining two simple shapes created motifs in Central Cumbria. It

is significant that these motif types are not found in the eastern region, on either monumental or on isolated stone. Designs D11 to D16 do not feature in the central regions, and are more complex, showing an affiliation with those traditions from other regions around the Irish Sea- and should be seen as part of the wider Megalithic art style.

In Figure 4.17, the simpler motif types are shown as the basis of the artwork at complicated and simple sites in both the central and the eastern regions. The most noticeable difference is that, in the Central Fells regions, medium and large cups are found along with smaller cups- although the division between small and medium cups is relative. In contrast, in eastern regions, no large cups, and very few medium cups are found. Cups, therefore, play a relatively insignificant role in Eastern Cumbrian regions, whilst lines appear to be slightly more numerous here (most noticeably, the natural lines at simple sites).

The combined motif types that are important in the Centrals Fells (i.e. cups with one line or two lines) -with the complicated zones showing higher values of these motif types (e.g. the cup and line, linear cups and cups with one and two joining lines) -are missing from the eastern region. The eastern region has more of the motifs that show a manipulation of lines to create new motifs. This is significant because lines (particularly natural lines at simple sites) appear more important in the eastern region- in comparison with the Central Fells/North, where cups form the main design element. The manipulation of lines to create rings around cups, spirals, chevrons, diamonds/squares and half rings, suggests that two very different, but interrelated ideologies, underlie the rock-art in the two areas.

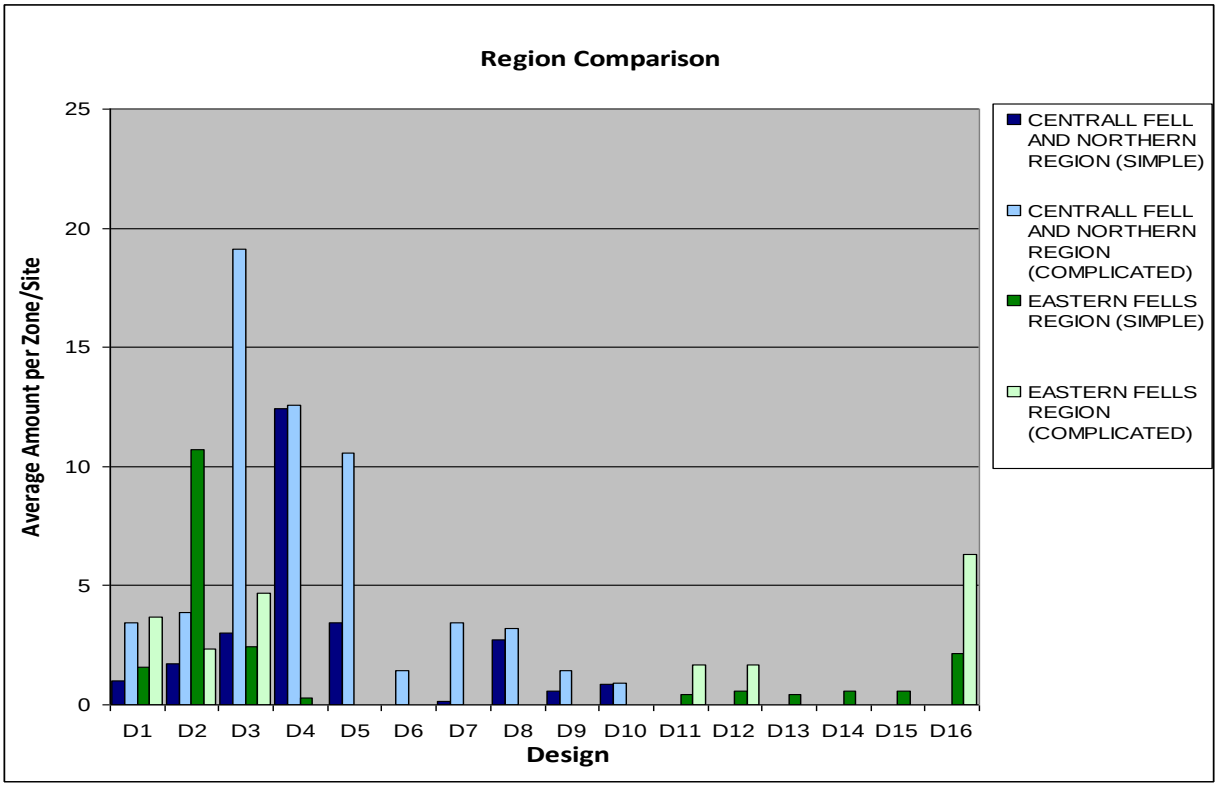


Figure 4.17 Average number of design types per site/zone in Central Fell/North regions and Eastern Cumbria regions, with averages for simple and complex sites separately.

Key – Designs

D1	Cultural Line	D9	Cup with two joining line
D2	Natural Line	D10	Cup within cup
D3	Small Cup	D11	Cup with rings/multi ring
D4	Medium Cup	D12	Spiral
D5	Large Cup	D13	Chevron light peak
D6	Cup and Line	D14	Chevron heavy peak
D7	Linear Cup	D15	Square/diamond
D8	Cup with one joining line	D16	Half ring

4.3.5 Summary

All narratives need a structure and this analysis, of rock-art in Cumbria, has attempted to locate the basic, underlying structure upon which the rock-art was organised. Rather than a random collection of cups and lines, the art was arranged (over numerous sites) to conform to an underlying design grammar. The basic elements of the rock-art in Cumbria are the cup in the Central Fells/North and the line in Eastern Cumbria. Natural lines are most common in the Central Fells/North, along with small cups. Medium size cups are equally represented at both

complicated and simple rock-art sites. The complicated sites contain more intermediate or 'mixed' motifs- where cups and lines have been joined together either with one, two or three lines going into a cup motif. Larger cups are more common at complex sites, but simple sites have more medium and small cups. In the east, half ring motifs are the most common design element, with cup and multiple rings and spirals showing similar values at both complicated zones and simple sites. It is interesting that in both Central and Eastern Cumbria, the more complicated the site, the more limited the motif repertoire is. A second important point is that in the Central Fells/North there is an emphasis on, what may be called, design interactions. Cups are often combined with lines to produce intermediate forms. In Eastern Cumbria, the motifs are more separate and apart, as the motif types are not made using intermediates. The cup and ring motifs, found in this region, show that the space between the cup and ring was important-rather than combining the cups with the lines, which is the style in Central Cumbria.

Focusing more on style, 'cup and lines style' dominates the Central fells/North, and more 'linear' shaped motifs are found to the east. Cups are used to make lines (the so-called linear cup motif) and also the basic element of the cup, with one or two joining lines (the so-called intermediate class of motifs). Lines -both natural and cultural- are used to frame the cups. In Eastern Cumbria, however, the situation is reversed. There are fewer cups, but, when cups do occur, they are enclosed within lines. The spiral, chevron, square/diamond and half rings, all share a common theme; they all are created through the manipulation of lines. In the Central Fells/North, motif designs were created through the manipulation of circles, or 'cups'. In the eastern region, the 'line' appears the most important motif type- and this desire (to create motifs using linear forms) is in stark contrast with the art of the Central Fells/North-, which has the circle as its basic feature. The symbolic significance of this is important and will be discussed in the subsequent chapter. It will also be necessary to explore the implications of these findings

further, in order to understand how symbolic resources are used in the creation of group identities.

4.4 Discussion

This chapter is primarily concerned with the structure and meaning of the art. Since meaning is embedded in practice, it was necessary to chart the historical developments that led up to rock-art's creation, in order to build a context. The environmental sub-context shows that, with further improvements in climate, and changes in vegetation, Cumbria became a more hospitable place, as the Neolithic period approached. Around this time, lithic technologies (along with subsistence strategies and settlement activity) continued in Cumbria, from the Late Mesolithic into the Early Neolithic period. However, whilst there may have been few changes in subsistence, the development of axe production- along with monumental sites and rock-art- showed that the Neolithic had arrived, in terms of ritual and social practice.

Away from the wider social developments, a number of distinctive rock-art styles emerged in Cumbria. Firstly, a uniquely Cumbrian cup marked style is found near the valley floor on rocky outcrops- which may be argued to be the earliest rock-art tradition in the county. According to Waddington (1998), this early phase of carving corresponds to the Early Neolithic (4000-3200 cal. BC), when carvings were made directly onto the 'living' rock. In effect, this could be described as a 'primal' or 'original' rock-art; certainly in Cumbria the rock-art of this period is the most simple and naturalistic. The second style found in Cumbria- around the Eden Valley- corresponds to Waddington's second phases (3200-2000 cal. BC), when the art is reworked into monumental contexts. This 'passage grave' tradition, of more complex shapes and line drawings, can be explained as part of a wider 'Irish sea phenomenon' described by Evans and Dowson (2004), and found across Wales, Scotland and the Isle of Man. Furthermore, although the Passage Grave tradition may have its origins in the earlier Neolithic, by the time this tradition arrived in Cumbria from Ireland, it seems to date to the Middle to Later Neolithic.

However, one of the main difficulties in attempting to suggest a possible wider Atlantic, or Passage grave, affinity to the art is that, by visualising the art (and hence making assumptions about its possible origin), its social function, and the internal dynamics of its creation, are being ignored. As such, too much emphasis is placed on the visual and external, and, at the same time, the social and internal conflicting factors behinds its creation, are ignored. In order to explore social function- or 'art as action', and the creation of the social system- what needs to be shown are the dialectical properties of the art. In essence, the dialectical system is a focus upon the inherent contradictions that form the basis of reality. If rock-art formed a part of a wider Neolithic reality, then it did it dialectically and through a series of contradictions and negations.

The rock-art of Eastern Cumbria is a negation and a contradiction of the style of the Central Fells/North. In the Central Fells/North, cups-and their arrangement in lines or into circles- created a stylistic form where cups are the central motifs upon which all other motifs are built. In Eastern Cumbria, lines are the basic design form; all subsequent motifs, half rings, spirals, and chevrons are made using lines, and not cups. Here, at its most basic, a cup based and a line based rock-art style, dialectically interacting and contradicting one another. Thus, the structure of meaning (in its most basic form) is that one tradition was cup based and the other was line based. How this structure and meaning was played out across time, through a dialectical relationship akin to a dialogue, will be explored in the next chapter.

CHAPTER FIVE

Textualising rock-art of Neolithic Cumbria

5.0 Introduction

All rock-art research has a tendency towards visualising and aestheticising. This chapter, instead, is an attempt at textualising the art, in order to undermine the privilege of vision and the objectifying gaze in prehistoric research. Chapter 2 showed how the history of archaeological practice, methods and interpretations has generally moved away from social structure and meaning- towards historicism and contingency, on the one hand, and objectivism, scientism and, ultimately, aesthetics, on the other. Chapter 3 explored some of the consequences of this (both positive and negative) by showing that it is still possible to show that the archaeological record was meaningfully structured, whilst at the same time being historically created by social agents. The first part of the methodological approach, outlined in chapter 3, led to chapter 4 exploring the structure of Cumbria's rock-art, which was based on the repetition of a small number of basic design elements. This chapter will follow on from the foundations outlined in the previous chapter, to explore the rock-art more fully by identifying the discourses and dialogue that formed the second level of its meaning. Since dialogues and texts are created through time, this chapter will focus less on structure and more on the historical development of the rock-art. A key feature of all texts (written, material or visual) is that, in order for them to be meaningful, they need to create a dialogue and,ultimately, a discourse. Therefore, in this chapter, the rock-art will be textualised, in order to locate discourses within the textualised rock-art narrative. It is important to note that discourse and text lies halfway between social structure (meaning) and social processes (agency). Thus, this chapter will act as a bridge between the understanding of the structure and meaning of the art, and its effects upon social agency in Neolithic Cumbria.

5.1 Creating an archaeological text

The break with processual or 'new' archaeology could be argued to have begun with Hodder's (1982) *Symbolic and Structural Archaeology* volume. Since its publication, the view that material culture (in archaeology) adheres to a signifying system, or text, has led to many changes in the way material culture is thought about. The importance of viewing past material culture as a material form, or metaphor of text, continues to this day. However, the view that material culture is a basis upon which meaningful social statements are made, was questioned. Many contemporary approaches, in archaeology, attempt to critique those 'meanings' that are often embedded within texts- in an attempt to destabilise normative values, and stop them being projected into the past. Furthermore, although not coming from a post-structuralist position, the growth of more empirical and scientific approaches in archaeology is also part of the critique against meaning and structure here. However, empirical, objectivist and visualizing research agendas are more concerned with rejecting social conflict and inequality in the archaeological record. As a result, contemporary archaeology may be regarded, at the interpretive and methodological level, as, in some senses, a reaction to the research aims set out in Hodder (1982). The main strands of criticism were (but not limited to) gender (Conkey & Williams 1991; Gero 1983; Gero & Conkey 1991; Gilchrist 1999), interpretation and normative values (Hodder 1991; Hodder 1995, Tilley 1993; Thomas 2000), and, perhaps most importantly, agency (Barrett 1994; 2001; Bell 1992; Brück 1999; 2001; Clark 2000; Dobres & Robb 2000; Pope 2007; Tarlow 1999; Van Dyke & Alcock 2003). However, whilst critical of meanings and structure, this research differs in that it does not reject meaning and structure in the archaeological record, but simply sees it as a small, but significant, part of a wider social whole. Furthermore the relationship between structure, meaning and agency, is an active rather than a passive one, and it is through discourses that structure is linked to agency and *vice versa*.

The special status of text, for post-structuralist writers, is that text can act as a bridge between social structures- which govern social action- and those actions, as they occur through time, and, which then, paradoxically, go on to reinforce and create those social structures. Social action, or agency, creating social structures, meanings and conventions-as part of a total social system- is often linked, or drawn together, through a discourse, or through discursive relationships, embedded within text. However, although text may be of central importance (as stated earlier) there is no desire, here, to return to the view of material culture as text. Text (and textuality) simply provides an effective methodological metaphor to help understand the role of rock-art, and wider material culture, in Neolithic society. Text in the postmodern world has become our metaphor for existence, and a substitute for any established modern or pre-modern ontology (Derrida 1998).

5.1.1 Discourse analysis, a modern approach to a Neolithic problem

One of the main weaknesses of material culture as text was that a 'text' is simply a label or description. A more accurate description is that a text is a collection of discourses which, methodologically speaking, means that the researcher has to show how material culture created a discourse, before some object or pattern can be labelled as a text. Discourses are language that is perceived to be meaningful, unified and purposeful (Cook 1989, 156), and, as a result, discourse- as opposed to simply words (symbols) or texts (collections of symbols)- are unified and purposeful expressions of structure and practice. In this research, discourse and text shown in Figure 5.1, is a means of linking contexts, such as environments and landscapes, to social action. This issue is important since there is a growing tendency, in archaeology, to reduce social action into landscape or environment determinism.

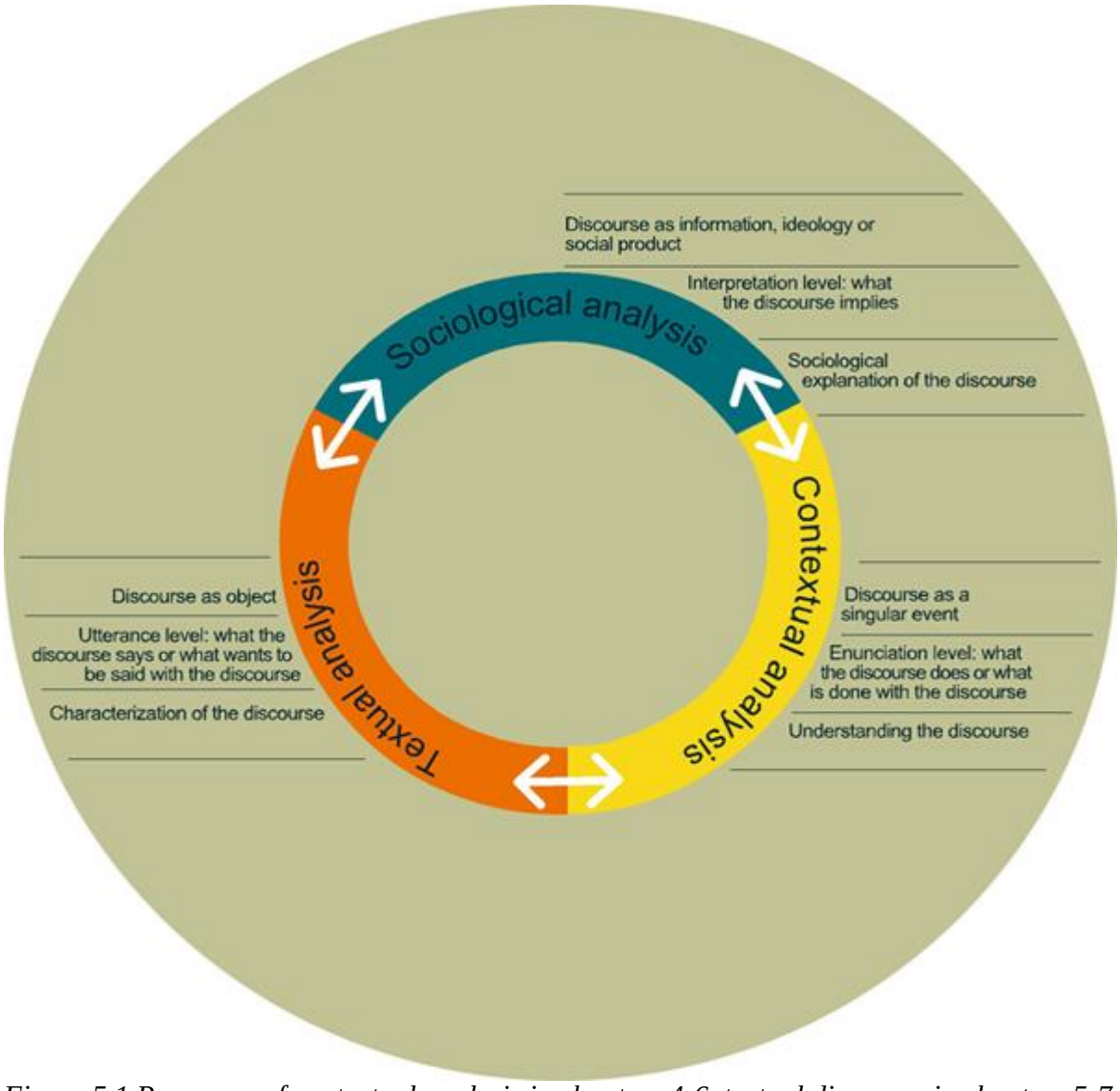


Figure 5.1 Processes of contextual analysis in chapters 4-6, textual discourse in chapters 5-7 and sociological (agency) analysis in chapter 8 (Jorge Ruiz Ruiz 2009, Figure 1).

Social interaction and identities that are created, as a result, are, for the most part, linguistic (or at least expressed through language, since all language and communication has a social function). Language is learned socially and used in social situations. As a result, there is an inherent 'discourse' and dialectic behind all language and actions that take place within the social sphere. Such discourse may be verbal (which means its duration or *discourse temporality* is limited to the person who speaks) and the memories of the people who heard the speech. Alternatively, it may have a material form-like rock-art in Cumbria- that is possible to 'read'

outside its original context. Thus, whilst original meaning cannot be located (as discussed in the final part of chapter three) by creating texts and contexts- ranging from the archaeological and environmental to the textual and cultural- a meaning may still be given to the archaeology.

Discourse analysis is one way to understand (or create meaning) from social interaction-given that rock-art is essentially a type of formalised social interaction. The goal of the *discourse analysis*, then, is to understand how *power* relationships bring about order and social change. The research methodology used here, whilst more commonly used in psychological and sociological research, can also have some validity when used in a Neolithic context.

5.1.2 Discourse analysis research methodology

The process through which discourses can be found, is set out here, methodologically speaking, in a number of stages; a) a research question is suggested, b) a text or a transcription of a conversation (the rock-art) is then broken down, or deconstructed. A discourse, in this sense, has a specific meaning- as it is related to a specific theme that is presented in the text- particularly those themes that relate to identity. Finally, c), a discourse is identified by the investigator as he/she attempts to find categories, themes and/or ideas in the text. The point, here, being to find discursive themes that occur and reoccur- as the authors or speakers attempt to create an identity. *Discourse analysis*, then, can view rock-art like text or, at least, as a 'metaphor of text'- which can be broken down and shown to be the creation of a number of recurring, symbolic resources. Rock-art is simply the Neolithic people's attempt to attribute meaning to the world, and to organise themselves socially.

5.1.3 Critical discourse analysis

Within discourse analysis there are two broad spectrums that focus on either descriptive discourses (traditional discourse analysis) or on critical discourses. In descriptive discourse

analysis, the investigator is attempting to explore how the system of the language is affected by contextual factors. This suggests that agency needs to be viewed as subjective, since discourses are the intentions of the subject. On the other hand, a critical discourse analysis (CDA) sees the subject occupying 'positions' that are created through text and language (Pennycook 1994)- and, as a result, agents (and their agency) are only realised through the main agency through which the discourse takes place. A crude, over simplified example of this could be seen in the way that hospitals construct the identities of 'sick people', prisons, those of 'criminals'- or how psychiatric hospitals construct the social discourse of 'the mentally ill' (Foucault 1973). Thus, discourse analysis, in its 'classical' sense, represents a focus on the 'elite' discourses; ordinary people only have limited access to discourse dissemination such as books, media, magazines, whilst the elites have access and control over a wide range of discourses (Van Dijk 1995, 20). This, naturally, creates a bias in the understanding of discourses, towards those who have power. On the other hand, CDA focuses more on marginalised voices that do not have access to the main outlets of discourse production. Furthermore, the research methodology not only seeks to identify dominant and dominating discourses, but also the study of opposition and resistance against domination (1995, 19), which is a recurring theme within discourse methodologies. Thus, within discourse analysis there are a number of issues; firstly, the identification of discourse which supports the elite in a descriptive discourse analysis- whilst, at the same time, there is, secondly, critical discourse analysis that attempts to subvert dominating ideologies by those who do not have power (or are not in the position to influence the main outlets of discourse), such as mass media or the government. Although this methodology is more suited towards identifying power structures and inequality in the modern world, it is still possible to locate the discourses of inequality that existed in the Neolithic world. Thus, it is the purpose of this chapter to identify both the dominating and the dominated discourses in Cumbrian rock-art.

5.1.4 Discourse and intertextuality

In the previous chapter, the aim of the research was to quantify the rock-art in order to show meaning, in a numerical and statistical sense. Statistics simply represent a way of showing information, or evidence, using numbers instead of words. However, instead of converting the rock-art into numbers, this chapter will 'textualise' the rock-art- making an analysis based on the creation of a descriptive narrativisation of the rock-art panels. In effect, it is hoped to create a similar method and research to one that may be undertaken by a social scientist (only with a language that is not known) in a differing cultural setting to the modern one-many thousands of years after these rock-art 'discourses' occurred (see Shanks & Tilley 1992, 107-115 for a detailed discussion of the fourfold hermeneutic involved in archaeological research). The purpose of this 'textualisation' is to locate a discourse, which has already been mentioned, but specifically attempting to locate a text type or 'genre' that then allows issues surrounding intertextuality, between rock-art sites in the Neolithic, to be explored. Since texts do not exist in isolation but make reference to other texts, an attempt will be made to investigate other 'texts' that were incorporated into the rock-art of Cumbria, by identifying the different genres or text types in Neolithic Cumbria.

Genre and text type are formed through socially conditioned conventions. Fairclough (1998; 2005) suggests six levels of discourse. The first two are vocabulary and grammar (covered in the previous chapter). The next two are text type/genre and intertextuality- and will be the main focus of this chapter. The final two are discursive formation and culture, and these will be explored in the conclusion. In this chapter, text type and genre cover the conventionalisation of text-or the conventions that govern a certain piece of art or literature as being grouped with other similar styles. For example, Central Fell rock-art is one genre, whilst the Eastern Cumbrian style forms another. In order to locate a genre or text type, specific forms or meanings need to be shown. In a sense, analysing and identifying genre is a way in which the

social dimension of the text can be contextualised; genre is the link between text and social 'con-text'. Kress (1990) suggests that genre results from actions of individuals, who act within their historically created bounds and contexts thus, having knowledge of existing generic types of genre (1990, 45).

This leads us to the second issue (after identifying text type), namely that of intertextuality. The historically driven developments of the art led to the conventions (genre) surrounding the use of the text-or rock-art. Intertextuality is derived from ideas suggested by Kristeva (1980), who attempted to show how signs, or symbols, create their meaning within a system that, unlike pure structuralism, was produced, first and foremost, historically and socially. Kristeva uses the dialogic method of Bakhtin (1981), rather than the more commonly used dialectic method- whereby instead of a dialectic, which only moves or progresses in one direction, (forwards) the dialogic is in continual dialogue with all other text, and has the power to influence not only what comes after, but also what came before- since the present has an ability to influence the writing about the past. Thus, the modern world has an influence on how the past is written, since the past is not a stable entity but an ever-changing relation to the present. As Barthes (1968) suggests, meaning does not and cannot be found within the text, but only through the complex interrelationship that exists with all other text. For Kristeva (1980), this signifies that meanings are meditated, filtered and coded, not only by the reader and the author, but also by other texts (Kristeva 1980, 69). Moreover, within the text, are 'traces of the process of production and cues in the process of interpretation' (Fairclough 1992, 198). In effect, the intertextuality of Kristeva building on Bakhtin shows us the historical dimension of text production since the history of text is its amalgamation of previous texts (Bakhtin 1986; Kristeva 1986; Pêcheux 1982). However, Kristeva, being critical of the dialectical method and its one way movement of time based in history, sees text, and textuality, as more atemporal and more of a dialogue in, and of, the present.

5.2 Textualising rock-art of the Central Fells/North

5.2.1 Introduction

If a psychologist or sociologist conducted this research today, the first stage of the analysis would be the creation of a transcription of a discourse between subjects. However, archaeologists are dealing with discourses that are many thousands of years old and in a language that is not understood. Despite having some unique difficulties in applying the above mentioned modern method to an ancient form of textuality and communication, it is believed that a transcript of the rock-art narratives can be made, although this transcript will have to be in language and form that can be understood today. Therefore, the first stage of a discourse analysis is to state a research question; for our purposes this will be the following; 'how does Cumbrian rock-art construct itself in a manner that makes it meaningful in creating identities in Neolithic society?' Firstly, the process begins by textualising the rock-art of the Central Fells/North region, focusing on the sites at Patterdale. The same process will then be repeated for the eastern monumental sites at Long Meg- plus the fallen stones, Little Meg and Glassonby. Finally, the special rock-art site of Chapel Stile will be analysed, since it is a monumental style that was situated in a region of naturalistic cup and line designs.

The process of textual production is not only historical but also based upon the articulation of other pre-existing text forms. Texts do not simply 'appear', but are negotiated, shaped, and based upon previous textual forms; rock-art is no exception to this. The first and possibly most important aspect of rock-art is the rock itself, and the natural carvings upon it. This may have provided a starting point for the creation of the text. Therefore, any historical build up of the text needs to take this into account.

The second step, in the creation of a text, is the interaction between the various symbols on the page. In writing (English), words and letters move from left to right in straight lines that move downwards to the bottom of the page. However, prehistoric 'texts' are, frustratingly, not that

simple. The interaction between symbols is multidimensional, so that, whilst the historical build up of the text should be apparent, this relationship is not linear. Instead, rock-art is a series of interactions between design elements, with the later additional motifs making reference to earlier designs (both natural and human made). The point is that rock-art, unlike other texts, is not linear in its temporality, but moves backwards as well as forwards in time.

The process of historicising the rock-art follows a simple pattern: firstly, identifying the original and natural rock-art carved by nature. Then locating the first phases of rock-art carving (in most cases, an interaction with the natural) Finally, if the site is more complex there may be evidence to show secondary or later carvings that interacted with the first waves of rock-art creation. Figure 5.2 shows this process in four stages. Stages 3 and 4 should be obvious from the rock carvings; the first two stages, however, are possibly how Neolithic people conceived the rock prior to carving on it. Naturally, it can only be assumed, but considering that the natural glacial aspect of the rock was so important to the style and form of the rock-art- researchers must consider how Neolithic people may have viewed the rock prior to carving, and how this may have influenced style.

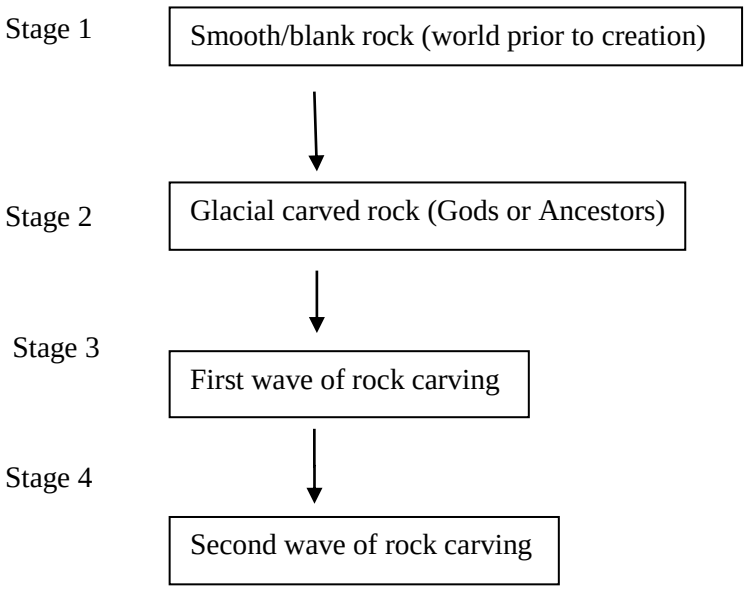


Figure 5.2 The historical build up of rock-art in Cumbria.

5.2.2 Introduction to Patterdale sites

The three Patterdale rock-art sites lie north of the village of Rooking, in the Central Fells region. Patterdale Valley is steep sided and narrow, and is located close to the southern end of Ullswater in figure 5.3. The rock-art sites are found in the lower flood plain of Patterdale Valley, and would have been one of a number of possible routes taken by Neolithic people moving from the south to the north. Barrowclough suggests that Patterdale and Langdale are similar in that both are the easiest and most important routes from the mountains, through the valley floors (Barrowclough 2010, 137). Furthermore, both are associated with natural resources- Langdale with stone quarries and Patterdale with food sources, along the valley floor (2010, 137-8).

Figure 5.3 The view westwards towards Helvellyn from Patterdale. The meeting of Grisedale Beck and Goldrill Beck to the south of Ullswater made Patterdale an its rock-art and important meeting place in the Neolithic (Photo R. Smith).

5.2.3 Patterdale 1 overview

This rock-art site can be organised into three distinct sections, or zones, moving from left to right (these can be termed sections A, B and C (Figure 5.4)). The general style and character of the art, at this site, consists of mainly cups of various sizes-small, medium and large. The shape of the cuplets themselves varies from circular to sub rectangular, although the majority are circular in shape. Any attempt at 'reading', or textualising, this site, needs to be sensitive to the fact that natural fissures played a key role in structuring the art narrative-and should be seen as part of the site's composition. Furthermore, some of the cups may, in fact, have been originally natural or elaborations from original natural forms.

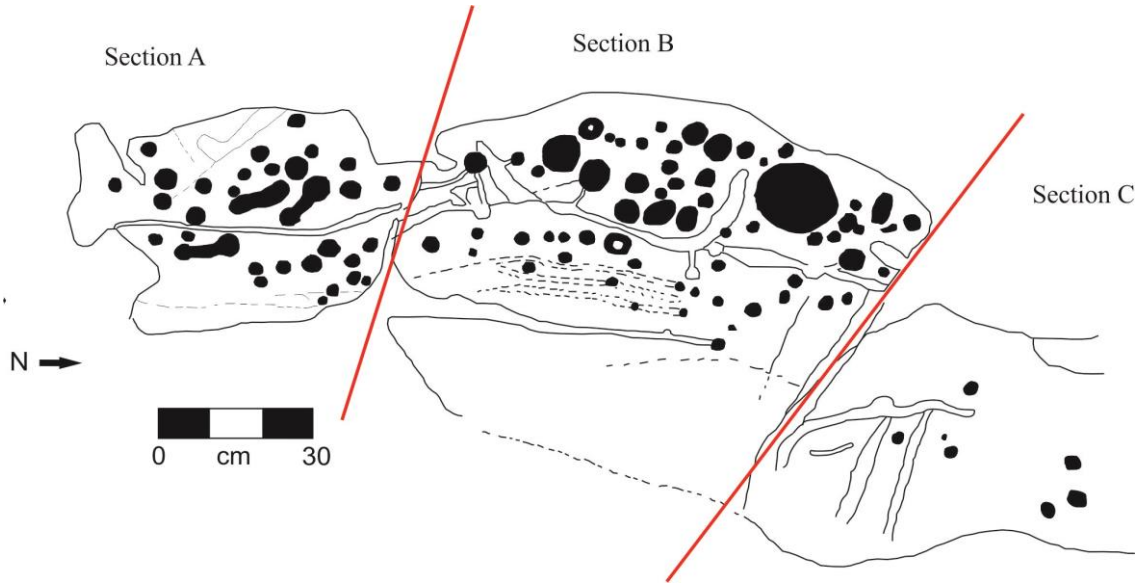


Figure 5.4 Patterdale 1 complete text divided into three pages or sections[1].

5.2.3.1 Patterdale historical build up

Patterdale site 1 seems to have been created using a number of historical movements. The time scale of the carving is naturally difficult to determine, with any certainty. The glacial carving

[1] All images adapted from Beckensall 2002.

would have been made over many thousands of years. The temporality of carving, during the Neolithic, could have ranged from days and weeks, to many centuries between carving episodes. What is important is that an analysis of the historical build up can be made without necessarily knowing how long it took to occur. Figure 5.5 shows the historical development and construction of the narrative. In the first picture, the rock, prior to carving, can be seen; how it would have appeared to the carvers before the art was applied. Naturally, 5000 years of additional weathering needs to be taken into account. However, the main scarring is glacial in origin and would have looked similar during the Neolithic.

The second picture, in Figure 5.5, shows the first stage of development- where the larger circles may have formed the 'crew' of a 'boat'. Phallic motifs in section A develop into the fully circular motifs in section B- with the small cup marks being added afterwards. The final picture of the montage shows the completed narrative, with the small cups added. It is supposed that the larger cups came before the smaller ones because the larger cups, along with the natural glacial line, created a central focus- with the small cups being in a more peripheral position. Naturally, this is not concrete evidence-but the issues of centrality versus peripheral seem to have been part of the art's purpose.

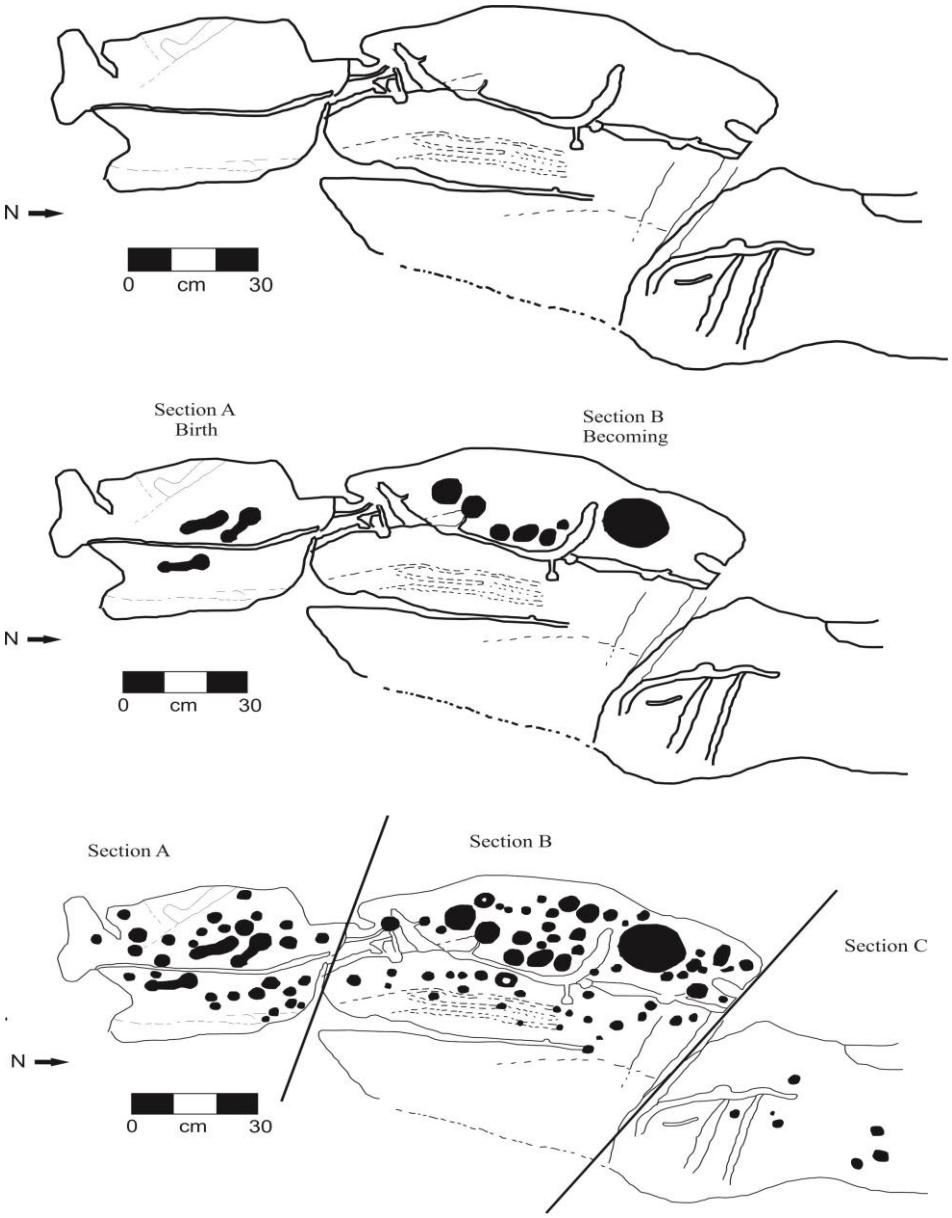


Figure 5.5 Patterdale Site 1 site prior to carving (left) and a possible second stage build-up of motifs (right) and the final stage of adding the smaller cup marks (below).

5.2.3.2 Zonation: Patterdale 1 Section A

This zone is divided into upper and lower sections, by a natural glacial fissure. The upper section has 16 roughly circular cups (one motif is two cups joined by a connecting line). The lower section has 13 cups and one motif where a line has joined two cups. Both the upper and lower sections have been 'hemmed in' by slight, natural fissures, in the upper and lower sections. The upper section has all the cup marks under a weak fissure- except 3, which falls

outside. A natural groove- running left to right-at the bottom of the rock creates the effect of 'sandwiching' the 13 cups and 1 intermediate cup motif, in the lower section.

Initially, the motifs seem to be placed at random. On closer inspection, however, the cup marks appear to 'mirror' each other (although there are exceptions), as the lower and upper sections can be connected by a series of lines diagonally across the rock (Figure 5.6). In effect, each cup seems to have its antithesis on the other side. The notable exception to this is the intermediate (phallic) motifs that seem not to connect with each other and, thus, form a central design focus. Whilst the cups seem to have an internal consistency between the upper and lower levels, the phallic motifs do not. In a sense, the intermediate 'phallic' representations (whatever the meaning or purpose in the text) take a central position, whilst the circular cups are located on the periphery. Here, an attempt at creating meaning through an internal/central and external/peripheral division was attempted; this was then purposely reinforced by the two varying motif types- one (phallic) being more central, the other (circular) more peripheral.

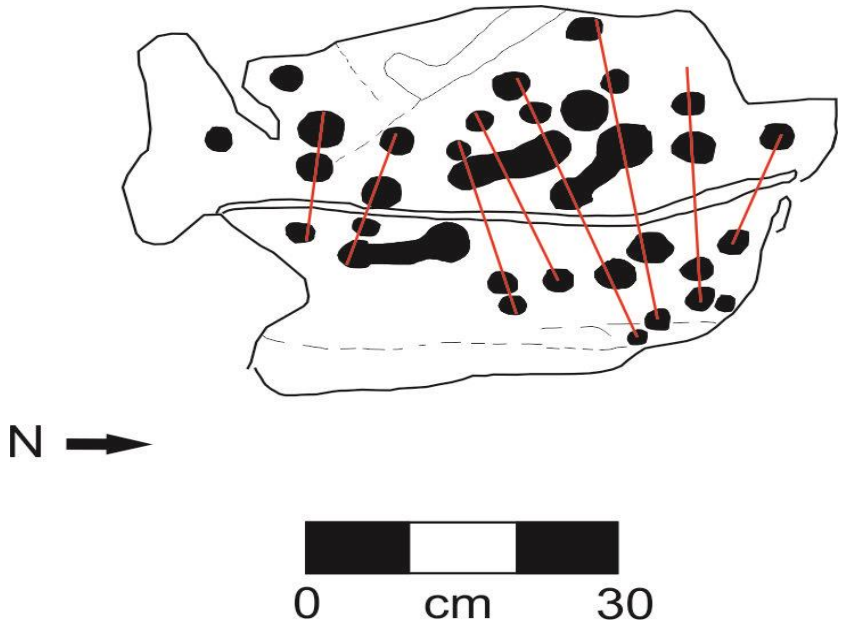


Figure 5.6 Patterdale 1 section A, the 'mirror' effect that the artists have attempted to create using the small cup motifs and which surround the centrally grouped phallic intermediate cup types.

5.2.3.3 Patterdale 1 Section B

Section B- like section A- divided into an upper and a lower section. This dividing line (which is again natural) creates a definitive 'boundary' between the upper and lower narratives. The natural, glacial fissure rises sharply up to the right of the section- whilst to the left, the fissure rises only at a slighter angle. The fact that this element is important is emphasised with the majority of the large cups being enclosed within it. What is more, these cup marks are distinctive due to their large size and presence close to the dividing natural fissure.

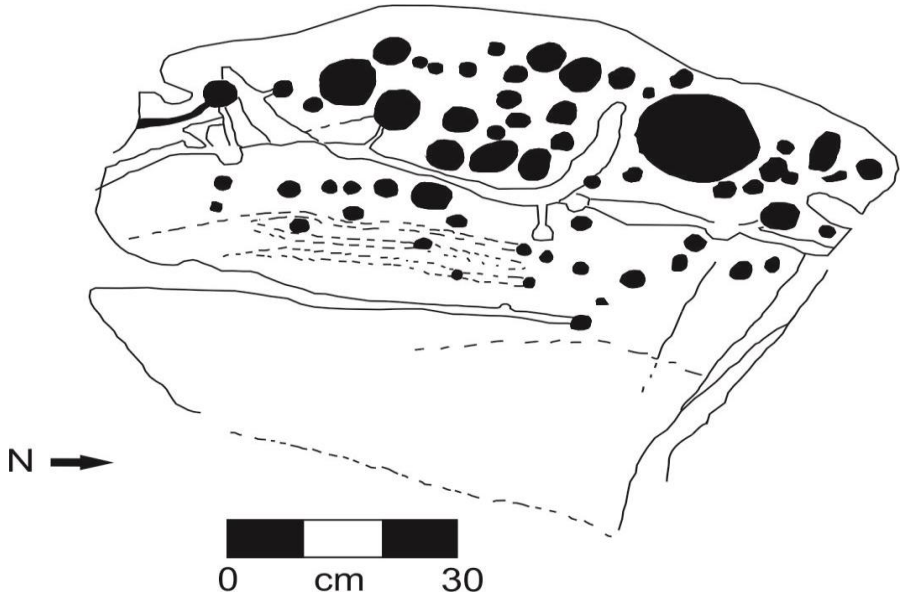


Figure 5.7 Patterdale 1 Section B

Interestingly, the shape of this fissure creates a ship like depiction- in many ways similar to the motifs in Scandinavia, if the mass of cups (as in Figure 5.8) is removed. This is further emphasised by the fact that a layer of large cup marks along the 'hull' of the boat creates an effect similar to the Scandinavian depictions of a crew- and which is seen at such sights as Nämsforsen. The suggestion that the central motif may be ship like, or have a metaphorical connection to water, may help to explain why this rock was chosen. The location of this site,

close to Ullswater (Figure 5.12), may have been significant for the carvers. To the right of the fissure, another natural fissure extends away to the far edge of the rock- whilst to the left, the same natural fissure has two ninety degree movements-which may represent the movement of water at the stern of a moving vessel.

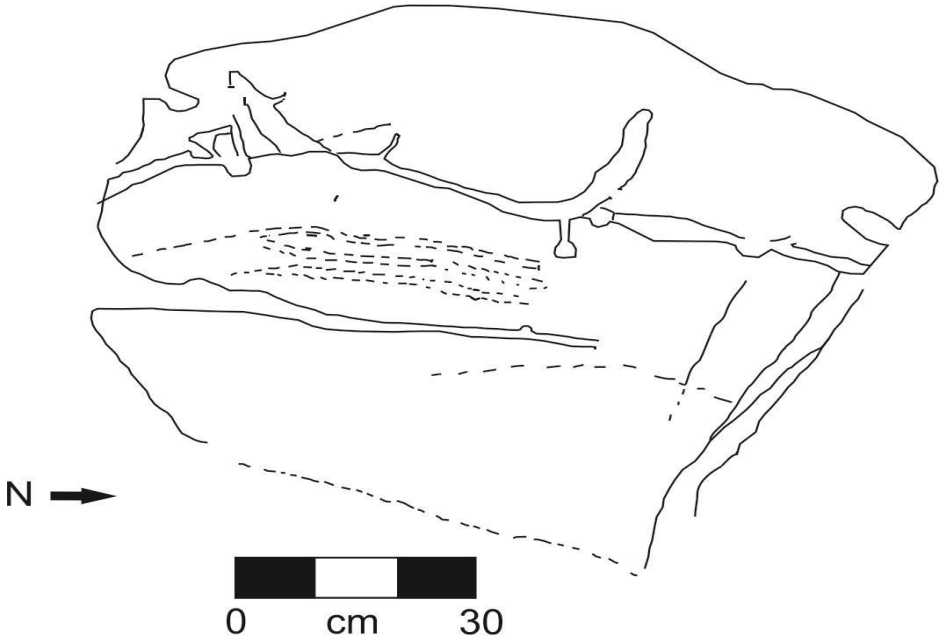


Figure 5.8 Outline of possible central ship design, with ship's 'hull' floating along on 'water' created by the natural glacial marking which divides this narrative.

A second notable (also seen in section A) is that the upper and lower sections have a differing style of cup carving. The upper sections, of both zones A and B, show a more pronounced carving, with heavier pick marks. One may speculate that if the central motif is, metaphorically, a boat, then the upper sections would have been above water- whilst the lower sections are far less significant, with a decrease in their size and depth. The effect of this is that they appear as if being reflected in the water, under the boat. Although the mirror/reflection is not as pronounced as in zone A, the smaller cup marks from the upper level can, to a certain extent, be reflected in the lower level in Figure 5.9. This variation may result from the natural restraints of the rock.

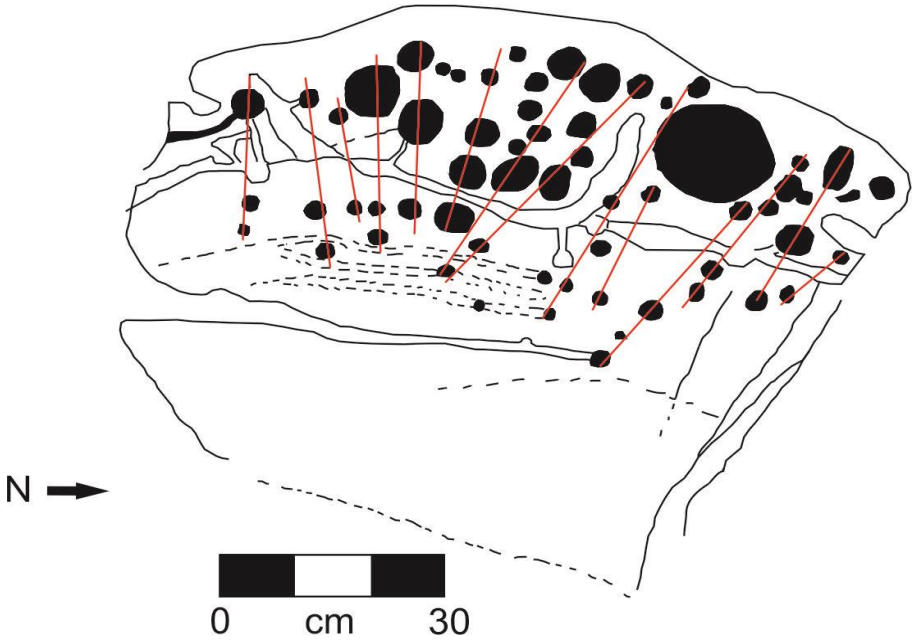


Figure 5.9 Section B mirror effect may have been an attempt to show the lower section as water with the cups reflected from the top, which could have been representations of celestial bodies.

The larger cup marks along the boat's 'hull' (and their close proximity to the 'boat' like motifs) might point to the possibility of an anthropomorphic representation of these larger, and more pronounced, cup carvings. Further, this suggestion may be supported by the fact that no 'heavy' peck cup marks are found within the lower section. If this water metaphor is extended, then one might argue that the upper section is above water whilst the lower section is below. The smaller cups that 'mirror' the upper may be seen as a reflection of the objects from the upper world, into the lower world. Finally, the boat seems to be moving towards a large, circular natural/human made motif with a cup mark inside. This may be the incorporation of a sun/moon motif that is an elaboration of the natural, and may have played a role in the choice of the carving site in Figure 5.10. Interestingly, the phallic symbols in section A are missing in section B-as these seem to have moved on or evolved into the larger and more dominant motifs in the boat. In terms of numbers, the upper section has forty cups, seven large and predominant cup marks-six of which are on the hull of the boat. The rest are smaller and less dominant, with two

approaching a sub rectangular shape. The lower level has twenty-nine small cup marks, none of which are dominant or large cups. Four cup marks are in the line of a central, natural fissure, which divides the upper and lower sections. Again, like section A, the same theme or discourses of centrality/periphery is found; larger more dominant upper, versus a shallow, weaker carved lower section. Moreover, having an intertextual relationship between this section and the first, the main and central motif has undergone a metamorphosis from the phallic into the large circular motifs, which now occupy the central position, with the small cups being placed around in the periphery.

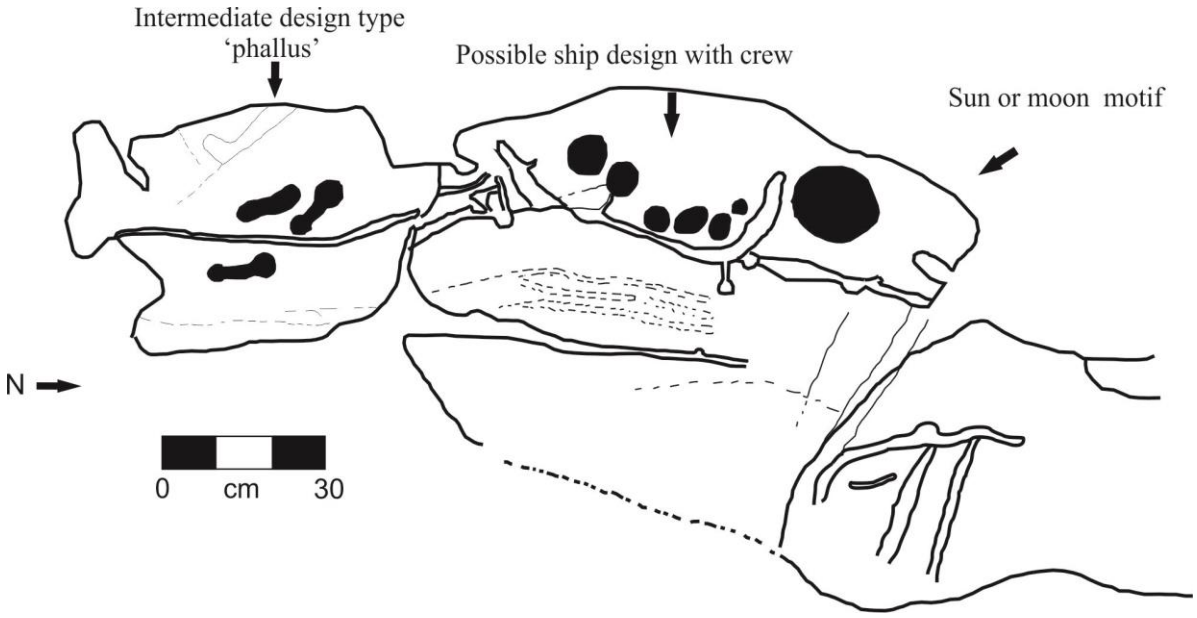


Figure 5.10 Patterdale 1 large motif types.

5.2.3.4 Patterdale 1 Section C

The final section, to the far right of the scene, is described as zone C (see Figure 5.11). This section has only seven cup marks; one in the centre of a fissure and one to its right, (whilst another one is located above, as well). The final three cups seem to be located on the far right side, and it seems, by this time, the narrative has ended or was brought to a close.

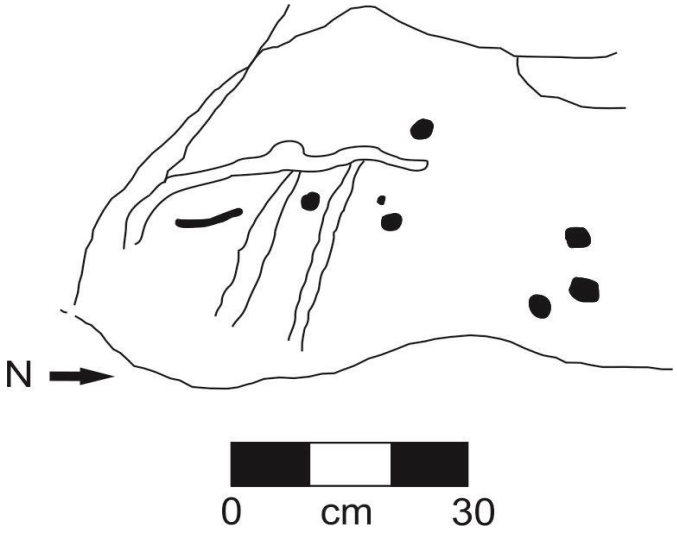


Figure 5.11 Patterdale 1 Section C

Figure 5.12 Southern end of Ullswater, Close to Patterdale Valley. Water routeways would have been as important (if not more so) than land routeways in Neolithic Cumbria. (Photo R.Smith).

5.2.4 Patterdale site 2

At Patterdale site 2, there are two distinct zones on the rock face- zone A and B (these can also be further subdivided (Figure 5.13)). There are both small and large cup motifs, which extend to phallic motifs and then longer lines. Again, natural fissures play an important role in creating a dialectic process between nature and culture.

Figure 5.13 Patterdale 2 division of text.

In Figure 5.14 (far left), the rock can be seen prior to carving, with its heavily glaciated surface (probably the main reason for its choice). The second stage, of historical build up of the text, is the addition of the linear elements of the narrative-with the final stage being the addition of the cup. This textual build up, however, has a number of problems- and it should be made clear that the cups may have come before the lines or that they were simply carved at the same time, and arose mutually. This leads us into a large and more complex issue surrounding temporality of carving. The only certainty in temporality is the carving of the glacial markings. However, when trying to ascertain the time frame of Neolithic carving, a number of problems occur. The duration or discourse temporality, of these sites, will never be known- but there is a possibility that the duration of rock carving may have occurred at different rates. It is suggested, here, that there were three possible carving temporalities (known as short, medium and long term).

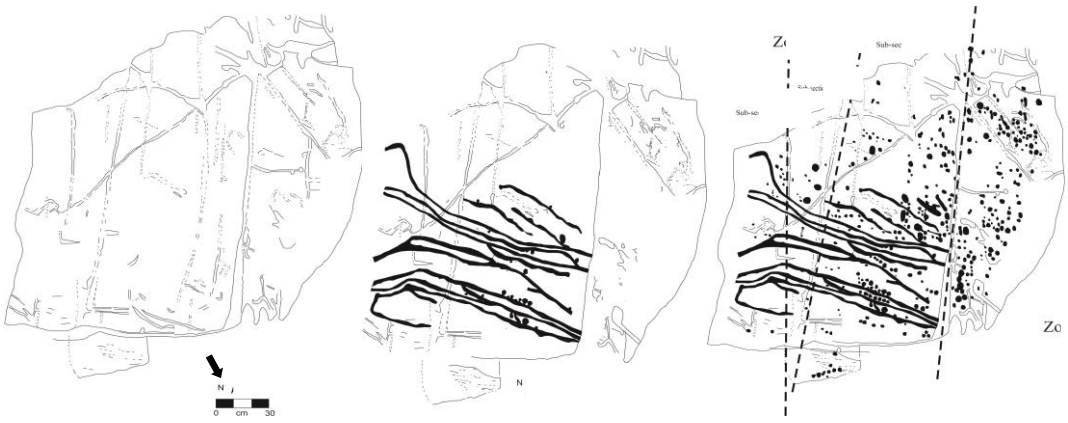


Figure 5.14 The pre-carved site (left) and the second historical stage of production (centre) with the adding of the lines, then the adding of the cups (right).

5.2.4.1 Zonation: Patterdale site 2 zone A

Zone A is separated into two, by a large glacial fault around the upper two thirds of the rock face- in Figure 5.15. Viewing this site from west to west creates a landscape 'effect', as the long lines may have been used to create a mountainous landscape, within the art. This idea

links to Sharpe's (2007b) suggestion that the Copt Howe carvings are the sun and the outlines of the hills, on the horizon, opposite the site.

Figure 5.15 Zone A with sections A (upper) and B (lower). The lines which run roughly east-west create a landscape effect and add a level of complexity which may have influenced the design form.

5.2.4.2 Patterdale site 2 Zone A section A

This first sub-section, facing east, has relatively few cup marks. Above is a strong, natural fissure that, essentially, separates the zone where fifty-two cup marks are found-but only five are large, with the rest being small. To the far left, above the glacial line, three lines are found. The first creates a mountain shape, which is further emphasised by the lower two lines. In the upper part of section A, above the main glacial line, the cup marks are 'boxed' in by four panels. This creates a series of right angles that the cups seem to observe. This pattern is repeated again, in the lower section.

5.2.4.2.1 Patterdale site 2 zone A (section A, sub-section A, B and C)

In sub-section A, six more cups are found in a zigzag pattern, with each one at a ninety-degree angle to the next. Viewed from the east to the west, this pattern seems to stand next to a mountain motif- perhaps forming a cosmologically significant pattern. Finally, five very small cup marks have been pecked into the mountain motif. Sub-section B contains three large cups at regular intervals that seem to be arranged along the fissures at lower and right sides-with two having small cup marks at the same angle. Sub-section C is the biggest and can be divided into a number of subsections- divided again by natural fissures. The main concentration of fissures, in the centre, is one large cup, which is enclosed by a further eight cups- and further flanked by two smaller cups. Above the glacial fissure that divides this section, seven small cups form a box like arrangement-as the cups are grouped in a, near enough, equal distance from each other.

5.2.4.2.2 Zone A section B

The lower part of zone A contains twelve lines running west to east. What is interesting is that the cultural lines run perpendicular to the glacial markings that are, more or less, south to north in their orientation. The decision to carve against the glacial fissures is significant. The second observation, of this site, is that the cup marks have been arranged in a linear fashion- either

between natural lines or cultural ones. Thus, historically speaking, the process where glacial lines were used as a backdrop, on which cultural lines were carved in the opposite direction, can be seen. Finally cups (of various sizes) were carved between the lines, or in lines themselves.

5.2.5 Patterdale site 2 zone B

The eastern section of this rock-art site contains a mass of cups ranging in size, but mostly small and medium sizes are found here. The arrangement of motifs consists of cups that have been arranged into lines. Furthermore, there are a higher percentage of cups being made into lines, as some of the cup motifs seem to 'spill' into each other, creating this effect. At this site three of the main design grammars, or themes, in Central Cumbria, can be seen; the arrangement of cups into lines, the 'cupping' of lines and the 'spilling' of cups, which are all different processes behind, what was termed in the previous chapter, 'intermediate cups'.

5.2.5.1 Patterdale site 2 zone A sub-section A (lower)

The lower part of the stone, in Figure 5.16, contains 38 cups, 6 of which 'spill' into each other -creating a linear form out of circular cups. Rather than being the result of a lack of skill on the behalf of the carvers, it is suggested that this purposefully shows an underlying concern- found elsewhere in the Central Fells- to make and arrange cups into lines, or linear shapes. Furthermore, two examples of the phenomena of capping or enclosing lines (mainly natural) with cup marks can be found. Moreover, cup marks have been arranged into lines-despite the fact that there is no natural glacial carving that would necessitate this.

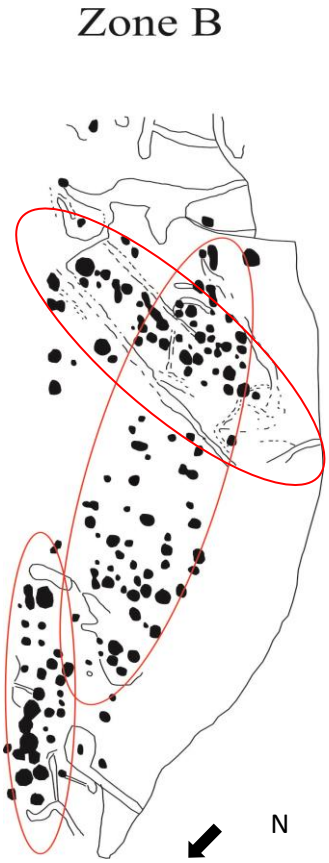


Figure 5.16 Zone b upper, middle and lower carving zones.

5.2.5.2 Patterdale site 2 zone B sub-section B (middle)

This section contains 47 cups, three of which have been joined together. Although the linear nature of the cups is not as pronounced as in the lower section, the arrangement of cups is far from random. In the lower part of this section, a number of cups have been arranged into lines. On the outside edge, the cups are formed into lines, sweeping round in a curved pattern towards the top of the rock.

5.2.5.3 Patterdale site 2 zone B sub-section c (upper)

54 cups, of various sizes and shapes, are located in the upper part of the rock. Like other sections, some of the cups have 'spilled' into each other- to create longer motif types. Secondly, the 'cupping' of lines with cups (also an important part of the Central Cumbrian narrative) can be found. Although the linear arrangement of cups is not as clear as in other sections at

Patterdale 1, a desire to 'line up' cups, rather than splatter them around the rock, in a haphazard fashion, can be seen.

5.2.6 Patterdale site 3

This rock-art site, according to Beckensall, lies at the edge of a mound that is raised on top of a small crag. It is said that the natural shape of the stone was emphasised by piling up gravel and boulders to look like an up-turned boat, or long barrow (Beckensall 2002, 29). The site has not been properly excavated, but the art was divided (Figure 5.18) into five zones- A, B, C, D and E- with a second art panel lying to the west side of the outcrop. The composition of this site consists mainly of cup marks, ranging from circular to sub rectangular- whilst cups with rings are also found. The motifs on this site are not complex enough to show any historical build up of the narrative.

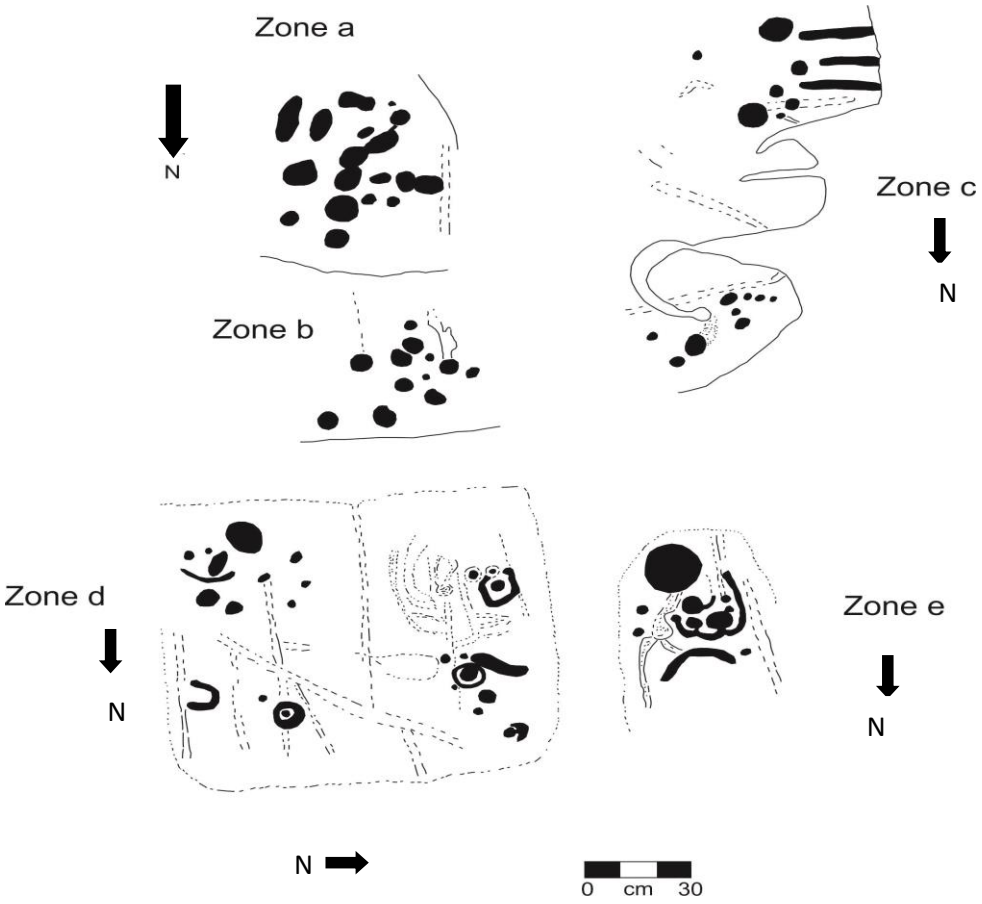


Figure 5.17 Overview of Patterdale 3 main pages/sections of this 'text'.

5.2.6.1 Patterdale site 3 zone A

The first section is made up of 18 cups in Figure 5.18. The cups are moving up from the lower part of the panel, following each one in sequence to create a line that eventually encircles a small cup in the centre. Here, is an example of a series of cups being used to make a cup and radial line motif, which is more common to the east in the Pennines, and Cheviots. This, possibly, may form the basis of a new type of motif, which is the use of cups as components in the creation of larger motif types. Up to now, cups have mostly been considered in isolation, but, here, there is a possibility that cups are being used to create larger motifs types. To the left, are found 2 cups and one cigar with 5 cups located to the right -connected to a natural fissure that encloses the rock-art on this 'page'.

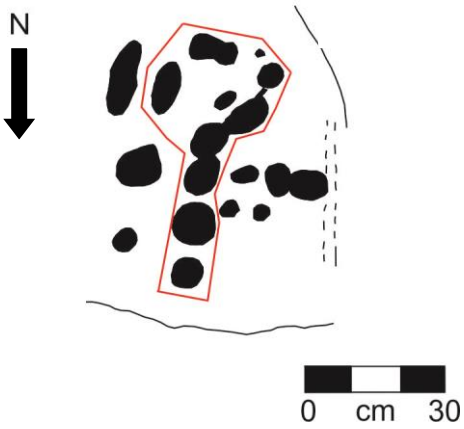


Figure 5.18 Patterdale 3 zone A.

5.2.6.2 Patterdale site 3 zone B

This narrative has 11 cups: 2 very small and 9 larger (Figure 5.19). 5 larger cups surround one of the small cups, and one cup is found at the end of a natural line, with a pair being found the bottom.

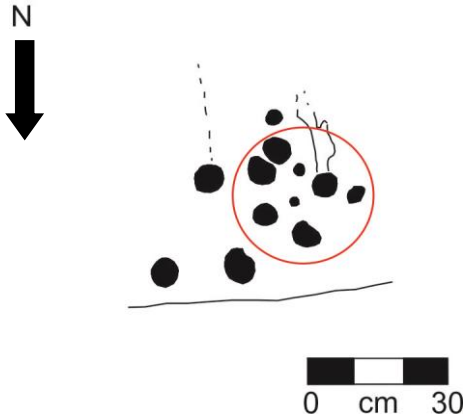


Figure 5.19 Patterdale 3 zone B.

5.2.6.3 Patterdale site 3 zone C

This panel is interesting in that it is one of the best examples of another feature of rock-art in this region; the placing of cups over lines. 16 cups and 3 lines make up the collection of motifs in Figure 5.20; a cup tops each line in the upper part of this panel. In the lower section, 6 cups form a V shape that points to a natural line; again, cups are being formed into lines. To the left of a natural shape, 3 more cups form a triangle shape.

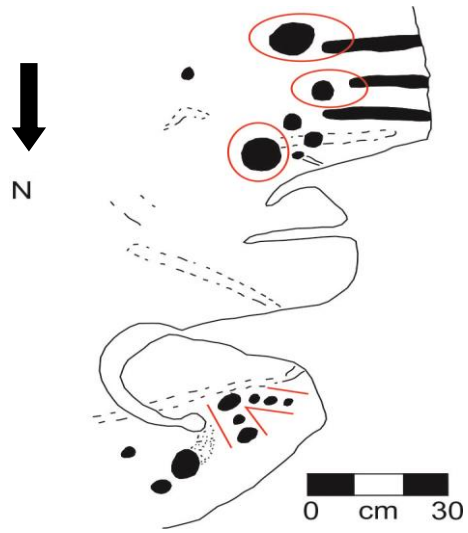


Figure 5.20 Patterdale 3 zone C.

5.2.6.4 Patterdale site 3 zone D

This narrative can be divided into two halves, by a natural line that runs through the middle in Figure 5.21. To the left, 4 large cups and 6 small cups are found. The upper part of the left (east) section is, again, a small cup, surrounded by a number of other cups to create a 'cup and ring' motif -made entirely of cups. The lower level has a U shaped motif facing a natural line. To the right, a small cup and ring is found in line with the upper cup and ring made of cuplets. Finally, a small cup orbits the lower cup and ring motif. On the right hand side, a cup and ring is found between a natural line- and a series of complex natural patterns. The diagram seems to show a natural cup and ring next to it -only smaller. The lower section has one cup and ring that seems to be rotated by a cigar and 5 cup marks.

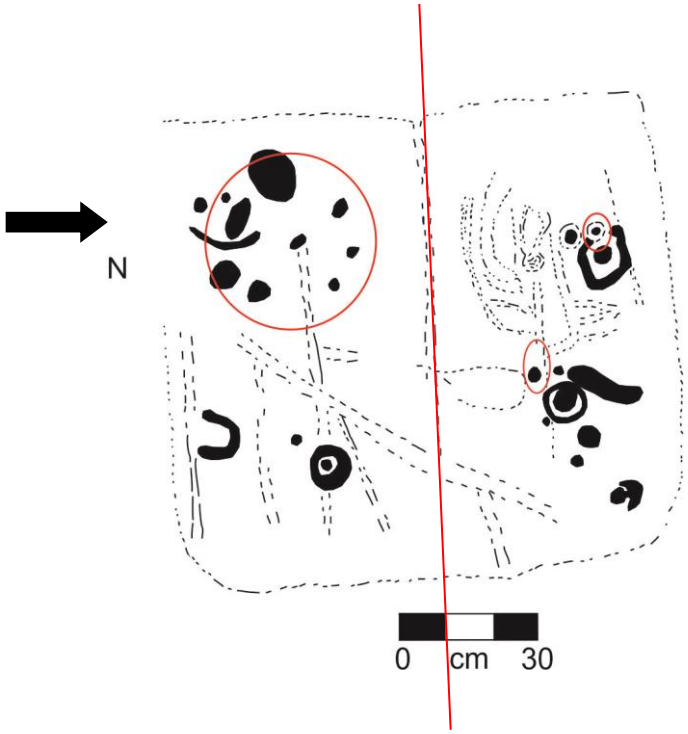


Figure 5.21 Patterdale 3 zone D.

5.2.6.5 Patterdale site 3 zone E

The difficulty in the narrative, here, is separating natural from cultural. 8 cups-2 of which are large-are integrated into the natural lines that curve to form 'wavy' line motifs. The large 'cup'

that dominates this panel, is natural but should be considered together with the rest of the motifs. The central motif is reminiscent of the 'boat' at Patterdale 1, where cups are found along the 'keel', to form a crew (Figure 5.22). Naturally, this is speculation- but broad similarities between rock-art sites show, perhaps, a unifying, underlying ideological basis. As already seen, the process of placing cups over lines is also a significant feature at Patterdale 1.

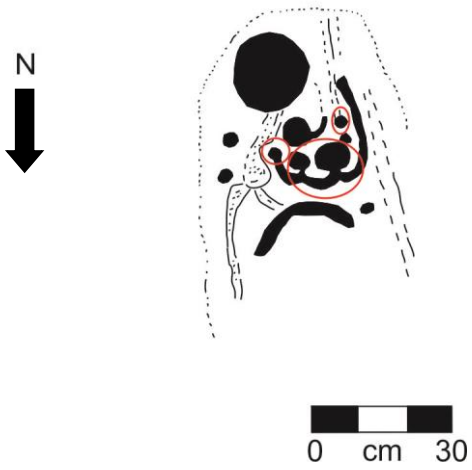


Figure 5.22 Patterdale 3 zone E.

5.2.7 Patterdale site 3 western design element

At this site, a natural fissure keeps a high density of cups and cigars/phallus, to its right side. To the right, 35 large cups, or cigars, are interspaced with smaller cups. Although it may look like a mass of motifs, upon closer inspection, some patterns do emerge. The centre is made up of an internal T-shape (Figure 5.23) with longer, intermediated cup motifs moving towards the centre. To the left of this central cluster, 5 large cups, and 1 cigar/phallus form a linear pattern to the right of another fissure. Finally, at the bottom of the panel a triangle, (possibly natural), is marked by 3 cups.

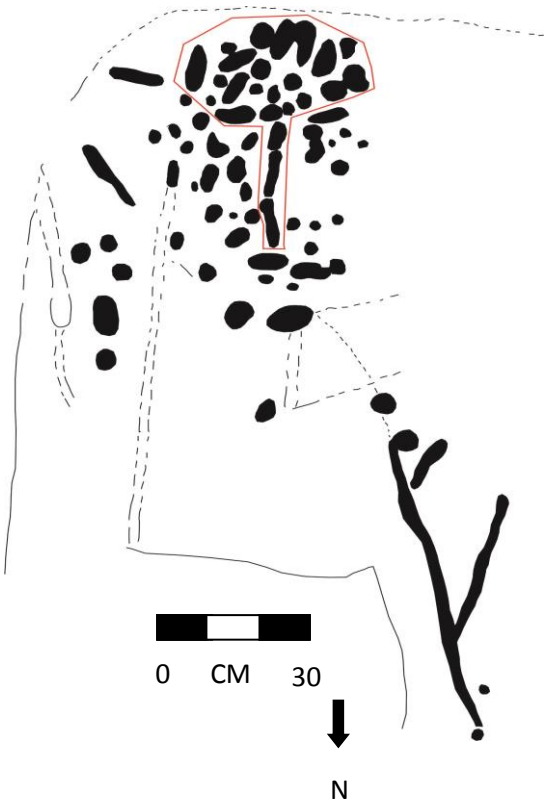


Figure 5.23 Patterdale 3 west.

5.2.8 Summary of Central Cumbrian rock-art

The main discourse themes are the arrangement of cups into lines (often corralled by natural glacial lines) and the creation of circular motifs, out of cups. Initially, the rocks would have been covered with lines of natural origin. The first carvings were probably lines, either extending natural glacial scaring, or adding new line carving. The cups, then, may have been carved afterwards. However, there is no certainty of this as the cups and lines could have been added together. Either way, the natural rock would have been already charged with symbolic power prior to its carving, as natural shapes and designs seem to have held symbolic significance (Tilley 1993). The pecking of lines and then the pecking of cups- either in lines or between them- further emphasised this connection to the natural and the circular.

The second discourse is the placing of cups at the top of both natural, and cultural lines. This seems to have been a device for emphasising the importance of lines on the rock and cups. The final discourse -or 'theme'- is the stretching of cups, or the joining of two cups together. This

reflects the fluidity of the concept of 'cup', in the Neolithic. Cups seem to have been pecked in ways that make them look like lines- and this emphasises the importance of the *circular discourse* during the Neolithic, in the Central Fell. However, to the east of this area, a rock-art style, that seems to have been a negation of this, is found.

5.3 Monumental rock-art of Eastern Cumbria

5.3.1 Introduction

The rock-art of Eastern Cumbria is found on, or within, stone monuments- and, thus, differs from the 'natural' setting of the Central Fells art. The style of carving differs from that of the cup mark stones with lines, linear forms, or cups made into circles being the most common type of art of the Central Fells/North. Thus, the landscape and archaeological context of this style of rock-art differs, and may have extra regional influences with a wider Irish Sea and Atlantic tradition (although the same could be said of cup marking). However, this analysis is more concerned with internal regional developments and what is important, here, is how this style created discourses and themes with Cumbria. Six rock-art panels from this region have been chosen to be textualised, in order to find the underlying discourses.

5.3.2 Long Meg main stone and her daughters (stones 5, 6 and 7)

Long Meg stone, just outside Penrith, is a 9 m high, 9 ton, red sandstone monolith, quarried probably from the Lazonby hills. She stands 25 meters outside the daughters, which are a stone circle 109m by 93 meter in diameter (Barrowclough 2010, 125-6). This stone circle is the 6th largest in Northern Europe (Burl 2005, 46). The stone circle lies to the south, on an enclosure ditch that predated it and, like the other ditch enclosures at Green How, Howe Robin, Carrock Fell and Skelmore Heads, is certainly Neolithic (Barrowclough 2010, 126). Burl suggests that this stone circle is probably transitional Late Neolithic to EBA (Burl 2000, 13). However, Clare argues that it is possible that Long Meg was not contemporary with the stone circle (Clare

2007, 44), and may be later than the ditch enclosure-suggesting that, perhaps, the date of Long Meg lies somewhere between the two.

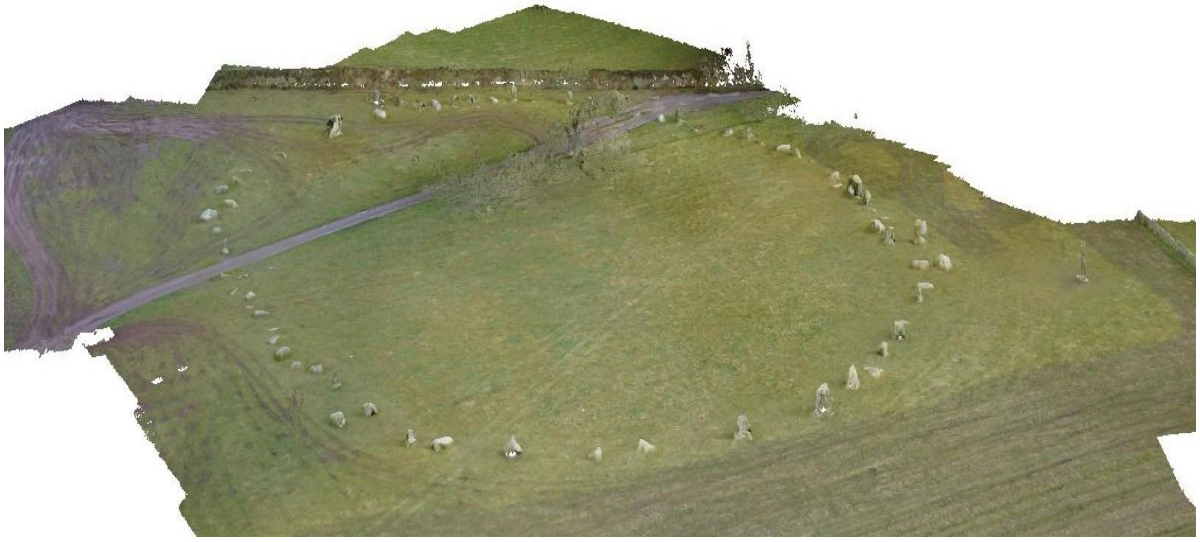


Figure 5.24 3D Model of Long Meg and her Daughters (retrieved from www.uplandpete.files.wordpress.com/2013/10/long_meg_model_oblique.jpg) [Accessed 08th February 2014].

5.3.2.1 Historical build up

As with all complex rock-art sites in Cumbria, a historical build up of the text seems to have occurred. More complex rock-art sites *may* have had a long discourse temporality, which means that they may have been carved over a longer period of time than more simplistic sites. Three zones at Long Meg were formed by natural fissures, which divide the rock in Figure 5.25. The motifs are mostly lines, cups with multi rings, spirals, and half ring motifs. The left side of Figure 5.25 shows, hypothetically, what the stone would have looked like prior to carving. Again, like the central sites, this stone was already carved with natural markings, which were later elaborated by motifs.

The initial impression of the art is that the form and style of the natural carvings on the rock seem to have been influenced, not only the choice of stone, but also the style of the art. At Patterdale, rock-art sites were chosen for, not only the glacial scarring, but also the natural cup marks. However, in the monumental style of Eastern Cumbria, the cup marks are less important than the linear shapes of the natural glacial scarring; this seems to reinforce the style of the art in its final form.

Figure 5.25 Long Meg main stone before carving (left),after carving (middle) and main zones (right).

5.3.2.2 Long Meg zone A (lower level)

At the foot of the stone, the long lines have been incorporated into motifs- on the left hand side. One spiral is found at the extreme left of the stone, with two half-ring motifs that are, essentially, lines that have been curved. In the centre of the curved lines are ring motifs. The two half rings are connected to a fissure using a series of lines-seven on the lower motif and two on the upper motif. To the left of the central dividing line, a number of curved motifs have

been attempted, and these seem to interact with the fissures running up and down this zone. In the far left corner, a multi ring motif was attempted.

5.3.2.3 Long Meg zone B (middle)

This zone has two large motifs-one, a spiral, the other a multi ring motif. Above the multi ring motif, a curved line was topped with two loops. The spiral motif below is connected to the upper motif by a circle that may be natural in origin. Both these motifs seem to share a relationship, as spiral motifs always seem to be found with multi ring and half ring motifs. Finally, a number of spirals and lines are scattered across the area.

5.3.2.4 Long Meg zone C (upper)

The upper zone has a central spiral that seems to form the centrepiece of the rock carving. Again, the spiral is connected to a half ring motif and a number of lines that cover the upper and left hand side. To the right side of the zone, two circles have been attached to the spiral motif- one with a line on the far right hand edge, and another line that moves back to another circle, close to the spiral motif.

5.3.3 Long Meg daughter Stone 5

Firstly, the main line, which may be an extension of a natural fissure, can be seen to run and curve around, nearly on itself, to create a U shape in figure 5.26. At the end of this line is a cup motif. Within this U shape, another small line that was curved can be found. At the lower part of this line, again, a cup was placed. It is interesting to note that the smaller line is in direct opposition to the larger one, and that the curve is in the opposite direction. This smaller motif could be considered as a smaller reflection of the other. Finally, a small cup was placed between the small motif and the larger curved line. From the main central motif, two loops have been carved, a lower one that is smaller, and a larger loop that connects the main line and the lower loop.

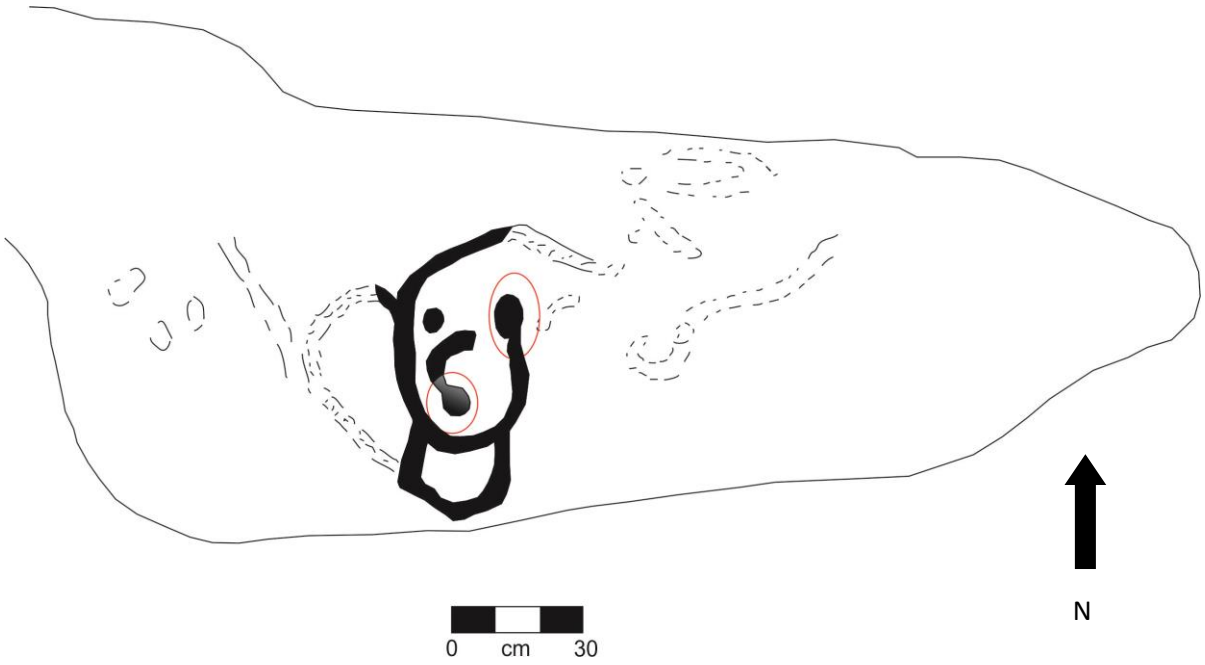


Figure 5.26 Long Meg stone 5.

5.3.4 Long Meg daughter stone 6

Two ‘circles’- one that is more towards sub rectangular, and one that is round (although not a perfect circle, as the two ends slightly overlap), are found at the end of natural glacial lines in figure 5.27. The lower sub rectangular motif is connected to the fissure, to form a tail. The second and upper motif has a more circular style that contrasts with the lower motif. Within the circle, a half circle was attempted. To the right, a small (presumably natural) cup can be found at the end of a fissure.

Figure 5.27 Long Meg stone 6.

5.3.5 Long Meg' s daughter stone 7

One motif on the left of figure 5.28, is made up of a series of half moons (three in total) that become progressively larger from right to left. Interestingly, this motif is compressed between a natural fissure- as if the natural carvings have been used to frame the motif. The second motif has a more circular and spiral character. Three small, cigar shaped carvings separate this motif from the one on the left. The final cigar shape merges into the circle that encloses a spiral shape in the centre.

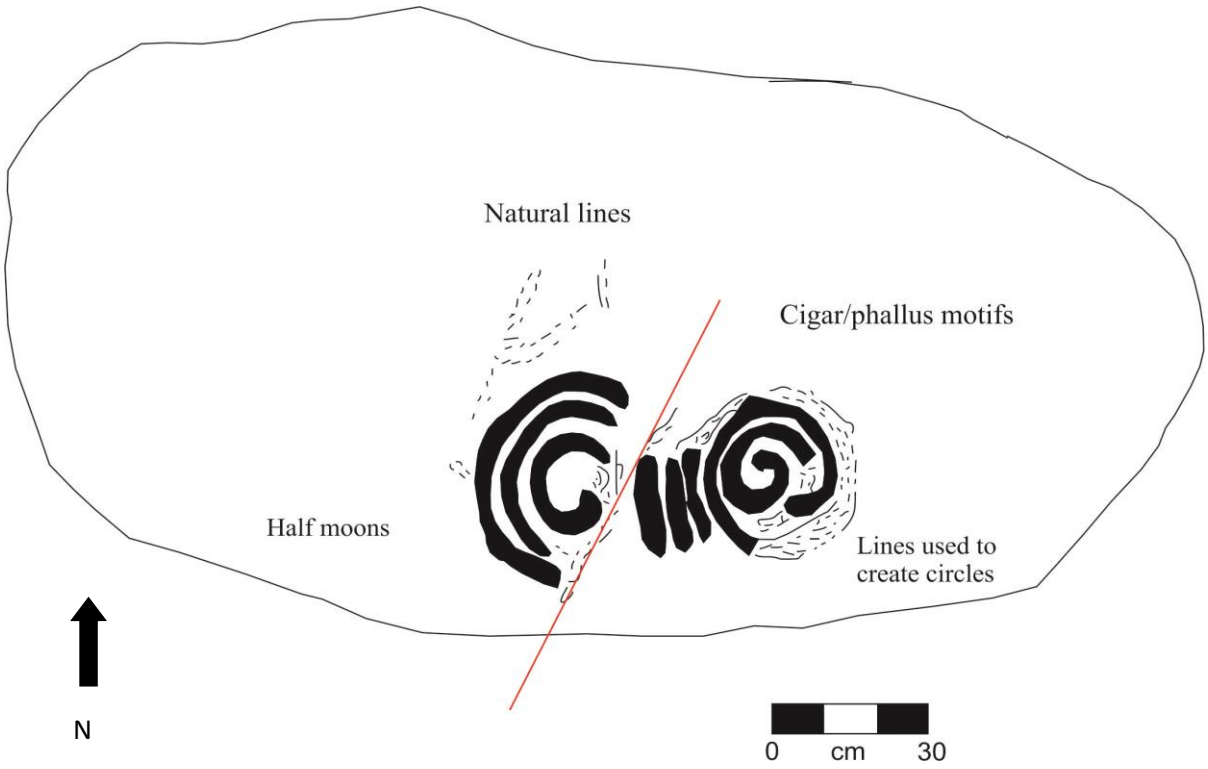


Figure 5.28 Long Meg stone 7.

5.3.6 Little Meg

Little Meg is a small stone circle that is made up of kerbstones, which seem to have formed the outside ring of a Bronze Age dated kerb cairn in figure 5.29 (Clare 2007, 50). This site lies only 650 meters to the north, and east, of Long Meg and her daughters. At the centre of this circle (or cairn, as it was in prehistory) bones, charcoal, and a pot inside a cist were found (2007, 48). Clare suggests that the crispness of the rock-art carving suggests that the work was done before the cairn was built- and may have been carved specifically for the monument (2007, 49).

Figure 5.29 Little Meg (retrieved from http://s0.geograph.org.uk/geophotos/03/37/96/3379672_9af5800a.jpg) [Accessed 8th February 2014].

Two motifs have been carved on a small stone; to the left of figure 5.30, the motif is made up of a single line that was curled over to create a spiral. The framing of this motif is within a circle that is attached to the second motif. On the right, a 5-ringed motif was created. What is interesting is that the left side was created using a continuous line that forms into a spiral whilst, on the other side, the motif is made up of individual components. Although a number of cups (possibly natural) can be seen on the stones, they do not seem to interact with the main motif types, like those of the Central Fells.

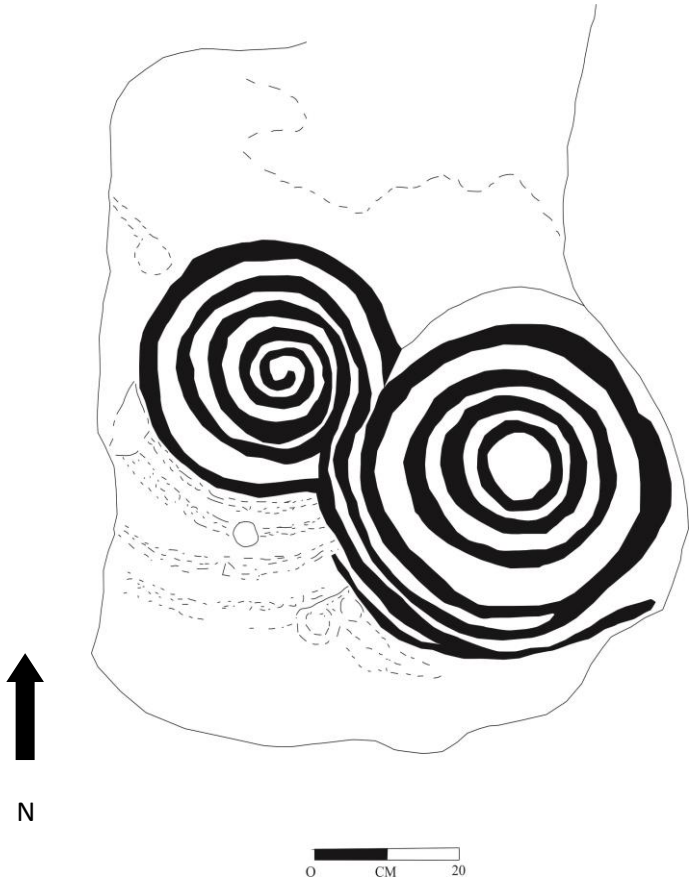


Figure 5.30 Little Meg.

5.3.7 Glassonby stone

Like Little Meg, Glassonby stone circle is, in fact, a kerbed cairn which can be seen in figure 5.31 (Beckensall 2002, 84-90), consisting of 30 kerbstones that are the only remains of an EBA cairn. This site contained a cist that had been robbed- but outside the cairn were found a Collared Urn that had been inverted, along with burnt bone material. It is thought that Glassonby 'cairn' lay on a cursus between Long Meg and her daughters (to the south west) and Old Parks' cairn to the north east (Beckensall 2002, 90).

Figure 5.31 Glassonby kerbed cairn (retrieved from http://www.megalithic.co.uk/a558/a312/gallery/England/Cumbria/glasso.jpg) [Accessed 8th February 2014].

The left side of figure 5.32 is made up of a collection of lightly pecked linear shapes. However, the main component of this scene seems to be a natural line that runs across the lower portion of the stone and connects the light, linear carvings with the heavily defined, circular motifs to the right. This straight line forms a boundary, and a setting, for the narrative -and is important when trying to understand its meaning. Like many other sites in Cumbria, this rock-art site contains a central dividing line that is, in most cases, natural and integrated into the artwork.

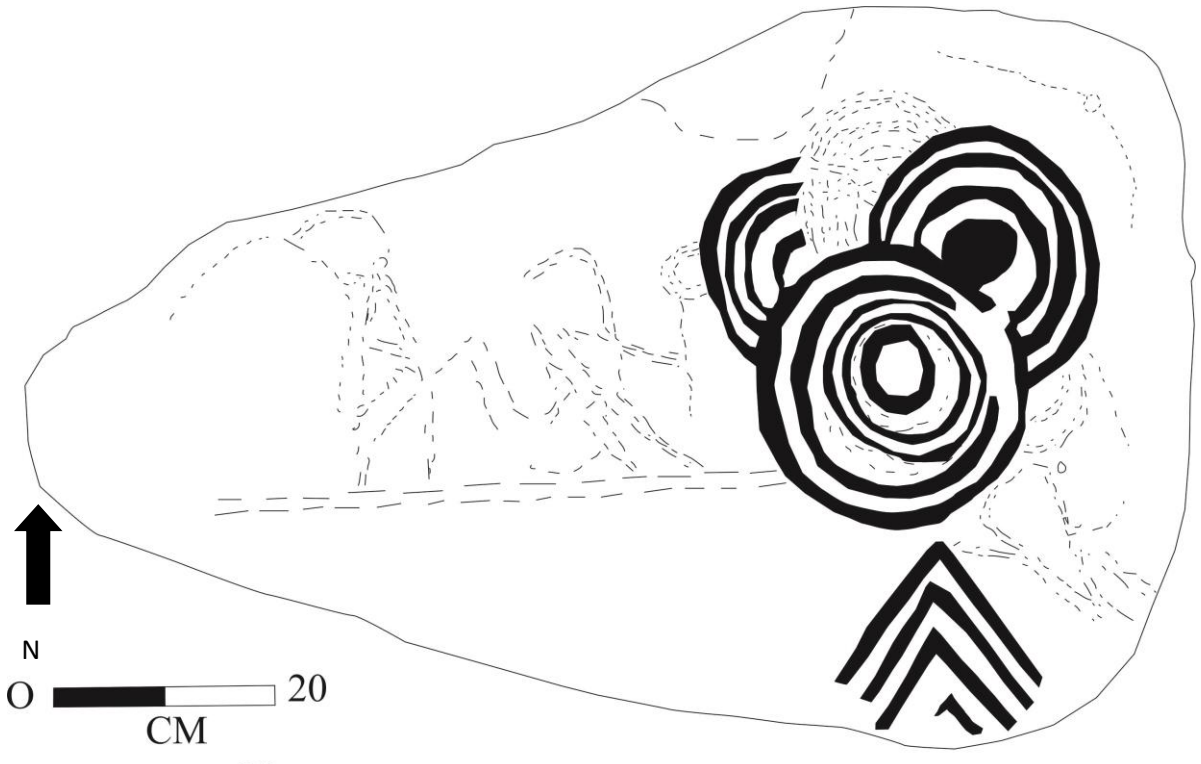


Figure 5.32 Glassonby stone.

The motifs (which are probably natural markings) on the left hand side are in contrast with those on the right. The left side carvings are ephemeral and linear, whilst the right side is heavily carved. The bottom part of the right hand side has four 'peaks' that are placed on top of each other to form a chevron shape. Above the chevrons are circle motifs that have a central whole, and three smaller circles are located above, which overlap each other. Again, like the 'peak' motif at the bottom, these shapes are made up of four circles or rings. The dominance of the central ring is emphasised by the fact that the other three can only be partially viewed. The two outside ring motifs are well defined, but the central motif is much weaker.

5.3.8 Summary of Eastern Cumbrian rock-art

The monumental rock-art, of the Eden Valley, was created using a number of discourse themes. These themes differentiate this style of art, from that of the Central Fells. In this region, the

manipulation of lines to create various motif forms can be clearly seen. This is in contrast to the Central Fells, where cups are often arranged into lines or, alternatively, cups can be arranged into circles. The meaning that cups had, in the Central Fells, lines have, in this region- and it is their manipulation that forms the basis of the artworks. The almost exclusive use of lines, and their curving to create the various designs, stands in opposition to the rock-art in the Central Fells. Lines are used in the Central Fells/North, but they are not curved into other motifs, as in the east of the county. This is because the underlining discourse theme- upon which it is based- is the manipulation of lines and not cups-which only makes sense in contrast to the central fells. Here, there are the beginnings of the emergence of intertextuality- where the meaning of the monumental rock-art of the eastern region was shaped by the rock-art of the other Cumbrian style. This is not to discount a possible wider Irish Sea and external influence; intertextuality is, however, about internal developments as well as the external factors that may have shaped the form and style of the rock-art in Eastern Cumbria. This issue will be explored in the final section, along with the role that discourses play in the creation of identities in the Neolithic. Moreover, it was the desire to impose identities upon the region that motivated the creation of the final site for textualisation-Chapel Stile (figure 5.33).

5.4 The Chapel stile paradox

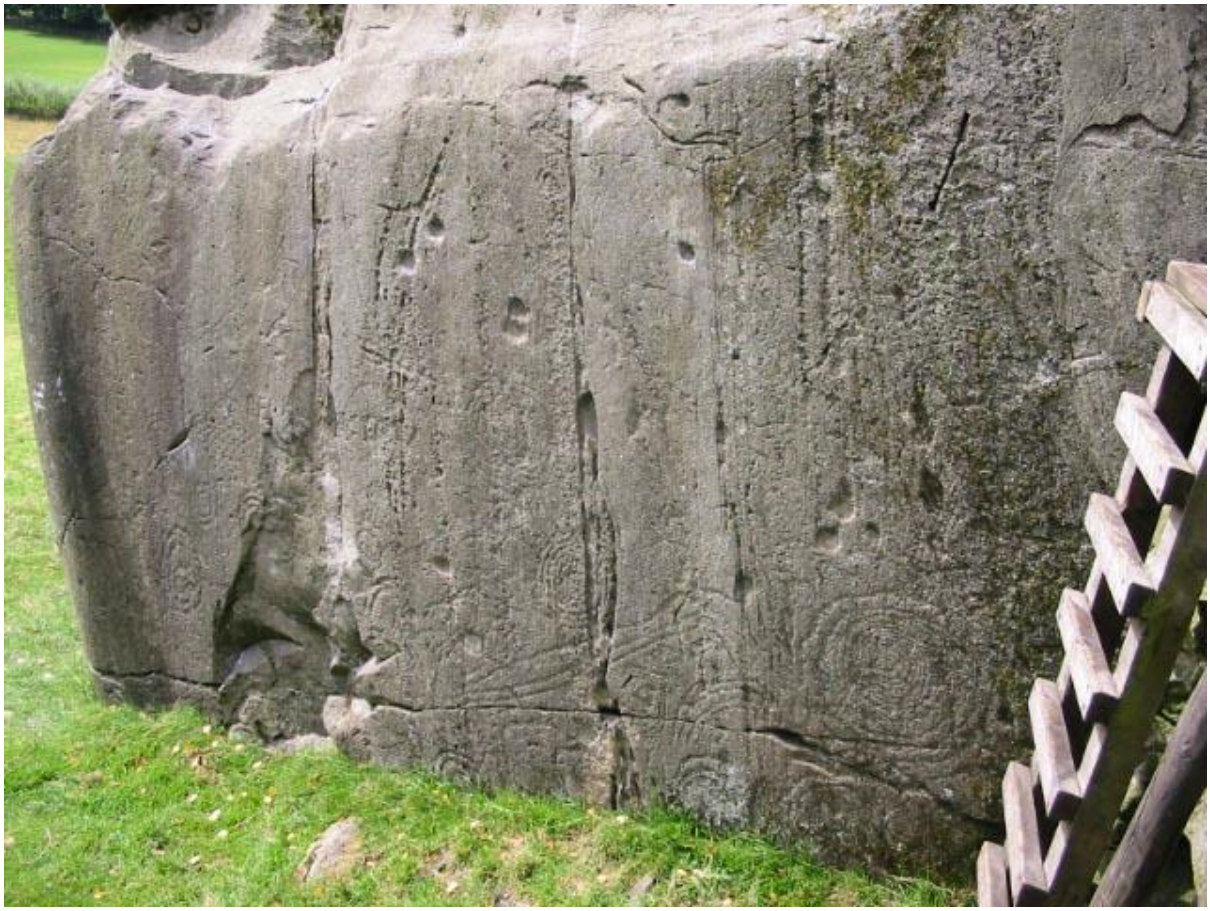


Figure 5.33 Chapel Stile rock-art site (Photo R. Smith).

Chapel Stile is perhaps the most recognisable and famous rock-art site in Cumbria, for two reasons. Firstly, it is the most complex and dramatic site (despite having the most limited design grammar in figure 5.34). Secondly, its location on a major route way (into Great Langdale at the foot of Pike O'Stickle), reinforces its connection to the axe quarries there. The site is a smooth, vertical volcanic rock located above a floodplain with significant views of the surrounding area- most notably over Langdale Pikes. As mentioned earlier, Sharpe (2007b) has suggested that the rock-art motifs are a reflection of the sun's movement across Langdale Pikes. Certainly, the axe quarry there is one possible reason why this stone was carved. The motifs

(mostly concentric circles) differ from the local, more simplistic rock-art at Patterdale- and share many features of the rock-art sites in the Eden Valley.

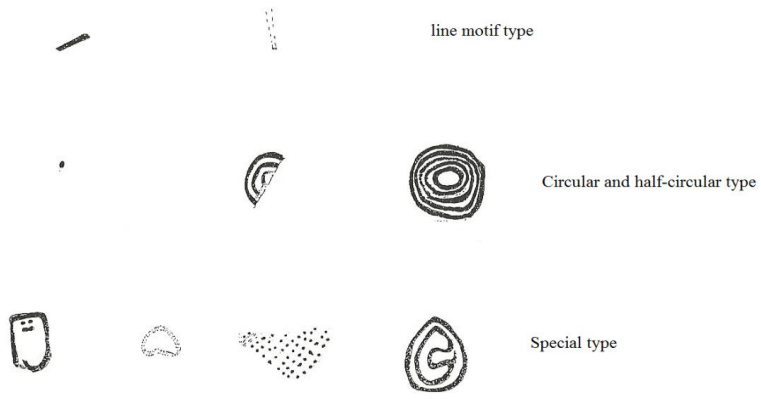


Figure 5.34 Main design elements at Chapel Stile.

Although, at first glance, figure 5.35 looks like a complex rock-art site, its composition is more simplistic than the other sites in the Central Fells or Eastern Cumbria. Its complexity, in reality, is the repeated use and reuse of a small number of design elements, which, in some respects, is similar to the repartition of simplistic motifs at Patterdale site 2. This site is special, however, as it contains some unusual rock-art motifs.

5.4.1 Chapel Stile zone A

Figure 5.36 shows that, at the junction of the natural line, 55 very small cups marks have been used to form a triangular shape- maybe as a reflection of the natural triangle created at the intersection of the two natural lines. Immediately below the triangle, two half cups have been grafted on to a line fissure to create an enclosed space to the other side; three semi circles have been placed on the line.

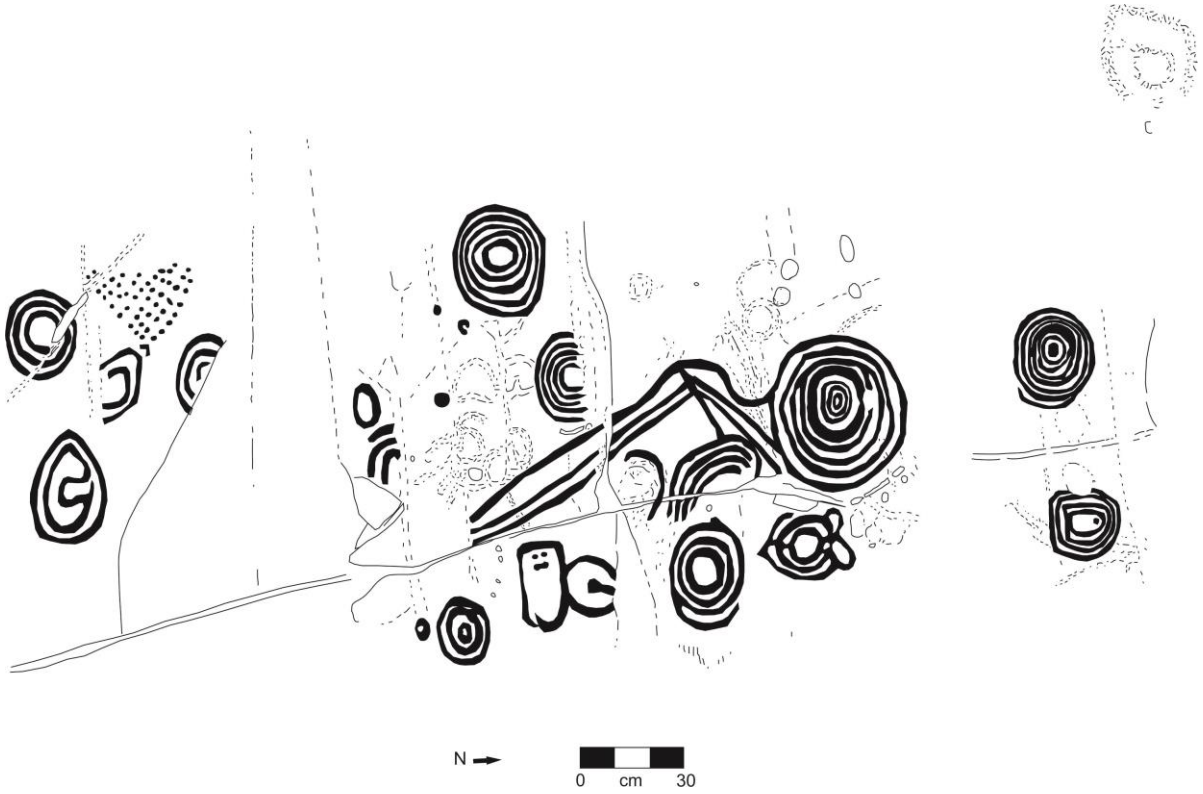


Figure 5.35 Chapel Stile complete artwork.

Opposite, on the other side of the natural line and transacted by a second natural line, three full rings have been created- independently and in contrast to the half rings on the other side. To reinforce the completed rings in this side of the dividing line, a double ring motif was pecked. The relationship between this motif and the others seems to be that of a narrative of 'emerging' out of the rock. Therefore, zone A can be viewed as divided into two sides. On the right there are two circle motifs emerging from lines with a 'cup triangle' motif. On the other side of the dividing natural line, two motifs are found- one circle and one elliptical shape.

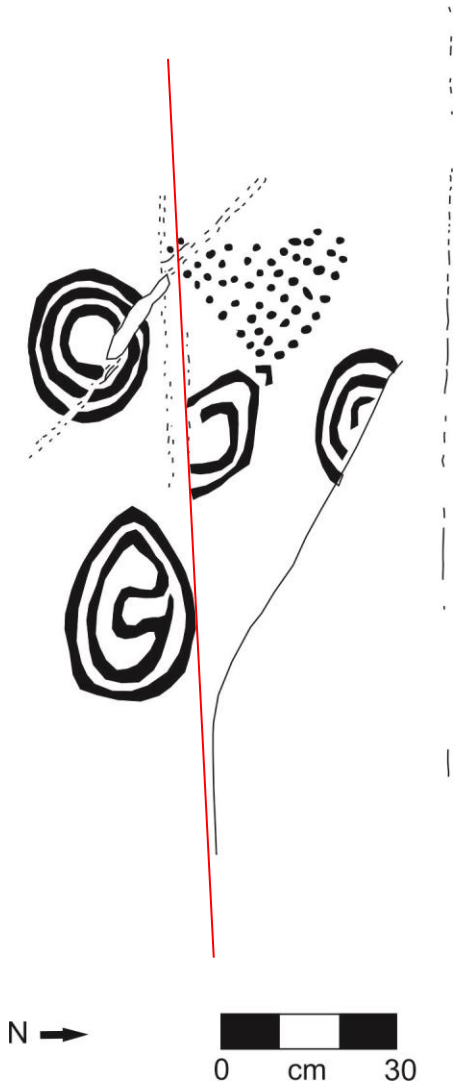


Figure 5.36 Chapel Stile zone A with dividing line.

5.4.2 Chapel Stile zone B

The main features of this zone are ring motifs, half ring motifs, lines, heart motifs and cup and radial lines (seen in Figure 5.37). The lower section has a linear sequence of three ringed motifs. The upper section is dominated by a five-ring motif that sits on top of a faint line that has a number of heart shaped motifs. The left side had three curved lines connecting two natural fissures. These are, in turn, topped off by a ring motif. The right side has three long lines that are part of the next zone. What may be noted is that, whilst the circle motif respects and interacts with the natural lines, the cultural lines often run over and do not respect the natural

motifs. This theme can be found at other sites (notably Patterdale 2) where lines are carved parallel to the natural ones. This zone is a concentrated collection of linear motifs that range from full circles to half circles and, finally, lines. Again, a similar theme, here, is the manipulation of lines-not only into different motif types, but also of the natural lines that are used to form a boundary for the design area.

Figure 5.37 Chapel Stile zone B.

5.4.3 Chapel Stile zone C

Figure 5.38 shows that zone C contains a natural line that moves along the whole section and contains, by far, the most complex ring motif (10 rings). Three long lines connect this motif with zone B. The lines move up and then divide at 90 degrees to fall back into the natural fissures. Whilst other motifs may emerge from the rock, this motif has the effect of drawing the viewer into the rock. Connected to the lines are curved lines just above the natural fissure that runs down the whole length of the rock. The motifs, here, are the most complex, although

the *repertoire* is limited to circles. Complexity in Cumbrian rock-art usually means a smaller range of motif types; a line that starts in the previous zone develops into a complex circle motif (which is of central importance in this zone). Its dominance, and completeness, are emphasised by the incomplete motif immediately to its left (four lines that have been given a slight curve). Below, to the left, is one complete ring, and underneath the main design is a strange elliptical shape- connecting three shapes with internal lines (which seem to loop around from the top).

Figure 5.38 Chapel stile zone C.

5.4.4 Chapel Stile zone D

Two natural lines enclose two ring motifs that are divided by a line running through the middle (Figure 5.39). Both motifs have a circle underneath them; faintly carved to, possibly, emphasise the reflective nature of this zone.

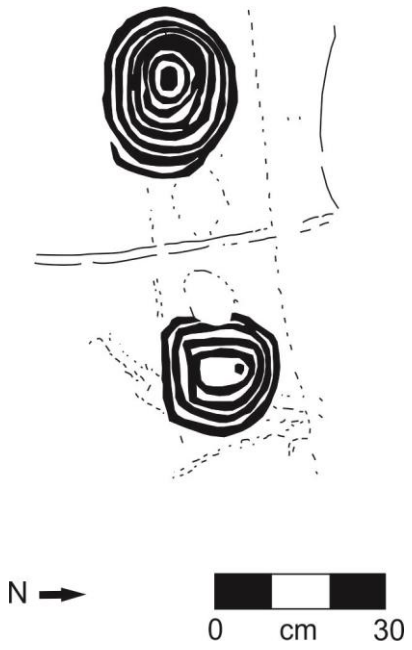


Figure 5.39 Chapel Stile zone D.

5.4.5 Chapel Stile in context

The carving of this site within a region that is dominated by simplistic and naturalistic cups is interesting. The simplistic cup markings of this region appear to be older and are related to a different period of rock-art production and, perhaps, are associated with the earlier phases at the stone quarries here. However, the style of art at Chapel Stile is reminiscent of later monumental art. As already noted in the above, it is the manipulation of lines into various shapes and motifs that is the foundation of the monumental rock-art of Eastern Cumbria. However, this style of art at Chapel Stile is on a different medium (natural rock rather than on a monument) and in a region that is associated with the quarrying of stone for axes. The circular shapes may have been a powerful symbolic reference to the monumental architecture in the

Eden Valley, and also the control of the production and exchange of the axes out of Cumbria eastwards.

5.5 Cumbrian rock-art and the three discourses

5.5.1 Introduction

By textualising the rock-art of Cumbria, the social dimensions to life in the Neolithic can be explored (this cannot be achieved by simply visualising the art). The textualised rock-art narrative is an attempt to socialize the Neolithic of Cumbria. Initially, a research question was outlined, which asked to what extent rock-art was created in order to produce meaningful social action. Rock-art achieved this as a link between structure (at a purely theoretical level) and agency (at a purely practical one). This then led to a number of transcripts of the rock-art being made and, finally, a number of themes being identified from within the discourses they created. The final part of this chapter will focus on what those themes might have meant to people in the Neolithic-not only in terms of how discourse relates to the structure identified in the previous chapter, but also how discourse will relate to agency in chapter 8.

Firstly, how the main discourses related to structure (in a purely ideological and abstract sense) will be assessed. Secondly, two other areas will be explored using the texts as a basis; the first is a critical discourse that seeks to expose the power relationships that discourses create- and sustain identities. The second is how intertextuality played its part in the creation of the rock-art narrative. Finally, how discourse related to agency and the historical reproduction of discourse through time, will be explored.

5.5.2 Structural discourses of Cumbrian rock-art narratives

The rock-art style of the Central Fells placed the cup, or the circular motif, as the major discourse theme in this region. Motifs can be made from circles, and cups are often arranged into lines. Lines are often capped with circles and some circular motifs are made out of circles. Motifs, when created using cups, are often atemporal, without any clear direction. The cup and

the circle may have been emblematic, connecting the identities of the people who created rock-art, in the Central Fells, to the natural world. As shown in chapter 4 (Figure 4.9), there is ample evidence of cup markings that are entirely natural, in the Central Fells region. The same also applies to lines but, unlike the art of the east, lines here are pecked in a way that mimics the glacial forms- and there was no attempt to curve or spiral the lines. Furthermore, where lines are found and carved (as in the case of Patterdale 2), they may have been of secondary importance to the cup marks. Thus, there seems to be a respect of the natural world and, possibly, circular conceptions of time.

In contrast, the main discourse of the rock-art of Eastern Cumbria is the line, which is the most important feature as using and manipulating lines make nearly all the motifs. Moreover, although cups may be found, they do not have the same emphasis as lines- in a reverse of the situation in Central and Northern Cumbria. Lines are made into spirals, which was a demonstration of how the circular can be made from the linear. The ideology behind the rock-art of Eastern Cumbria is in direct contrast to that of the central regions that it attempts to control, dominate and undermine.

A second discourse is the relationship between the natural and the cultural. Lines in the Central Fells region are mostly natural and are found on rock close to the axe producing regions. The rock-art of the Eden Valley is a manipulation of the natural that bends motifs to show how nature, and the natural world, can be changed. The same ideology, it seems, lies behind the stone circles on which the Eastern Cumbrian rock-art is found. Thus, in terms of structure, these discourses represent a manipulation, or 'bending', of the natural world. However, in the Central Fells there is a cup and lines style with a discourse based on mimicking or working with the natural. This structural, ideological change may be represented as;

Central Fells	Eastern Cumbria
Naturalistic rock-art	Formalistic rock-art
Cup Motifs	Line motifs
Circular view of time	Linear view of time
Nature	Culture

Figure 5.40 Structural divisions of rock-art texts between the Central Fells and Eastern Cumbria.

Figure 5.40 outlines, in a simplistic sense, what the basic underlying structure of the art seems to have been in Neolithic Cumbria. It must be remembered that the division is a dialectical and not a static structural 'binary oppositional'. The meanings introduced here are a relative and interconnected dialogue between two opposing principles that organised and structured the art styles of two different regions- at possibly two different periods in the Neolithic. It is through their interaction and flux that the processes of history, social processes and agency occur.

The basic structural expression (of the discourse) is how the carvers viewed the natural world, and their place within it. In the Central Fells, the basic cup thesis theme was used to express connectivity to the natural world and a building up of power, based on natural resources- perhaps in the earlier Neolithic of Cumbria. In contrast, the structure of the eastern art is dominance, and a manipulation of the natural world (possibly more in line with a Later Neolithic and EBA ideology). According to Giddens (1981), structuration makes use of the 'space/time continuum' as the basis for understanding social relations and social systems that are reproduced through institutions. Although Giddens is, of course, referring to modernity, it can still be argued that this approach is valid, in relation to the past.

The space (Central Fells) and time (Neolithic) allowed for the creation of institutions that surrounded the axe quarrying sites. For example, the axe quarrying sites- or the exchange of

polished axes at stone circles of Cumbria- may be considered as an 'institution' of the Neolithic. Rock-art, then, could have been a way in which institutions came to institutionalise certain aspects of Neolithic and EBA Cumbria. Rock-art, then, was an expression of the structuration that was occurring at that time and place, as rock-art was also a means of 'institutionalising' the axe 'trade'. The Central Fells' circular rock-art works with the natural world, whereas the eastern linear based art works against the natural world. However, this needs to be understood as part of a wider discourse of Neolithic power and inequality.

5.5.3 Discourses of power

In a very simplistic fashion, the basic structural components that underlined, and allowed, discourses of Cumbrian rock-art to occur, was identified. However, the complexity begins when there is an attempt to show how structure and meaning were expressed through action and power, in the Neolithic. It is at this position, between structure and agency, that discourses- and their relationship to genre and intertextuality- can be found. Firstly, when examining text and genre, the conventions that formed the basis of Neolithic rock-art discourses, need to be located. In the Central Fells, the conventions of cup marking created a genre where the creation of cups- and their articulation into different forms - created the text type that defined the region and the people who made it. In the east, the opposite situation occurred with the use of lines and their articulation into the various line based motifs. Thus, one type of text, or genre, is directly influenced by the other. The next level of discourse related to intertextuality.

The inherent instability of the texts (written or otherwise) is often a fundamental basis for understanding the role that material culture plays in the sustaining of social relations. If discourse is viewed as dialectically sustained, then the method is only capable of identifying meaning and structure, in an ahistorical sense (which is of little use to an archaeological narrative). Since dialectical analysis views time moving in one direction (forwards), the purposes of exploring Neolithic discourses- and moving beyond the limitations of dialectical

analysis-needs to be viewed more as a dialogue. The dialogue (unlike the dialectic) can move both forwards and backwards in time, which is certainly its key advantage in prehistoric social research. Thus, intertextuality_ rather than intervisability, in a Neolithic sense- represents the dialogue that existed between the rock-art and Neolithic texts.

Therefore, the first intertextual dialogue found is a textual relation between the cup marked rock-art of Central Cumbria, and the naturally occurring motifs already on the rock. The style and text type of the Central Fells is thus conditioned and shaped by its relationship with the natural geological rock and its glacial scarring. The creation of cups amidst the glacial marking is far from a random collection of meaningless carvings, but a detailed and complex dialogue that the carvers, of the rock-art, had with the natural stone underneath. In essence, this is the first level of intertextuality in Cumbria, between the natural rock-art and the naturalistic cup and line art.

The next textual dialogue that exists is between the rock-art of the Central Fells and the monumental rock-art of Eastern Cumbria-since the rock-art of the monumental sites is in dialogue with the rock-art of the Central Fells. Here, the art of the Central Fells is inverted, as lines are used to make circular motifs. Circles made from cups are an antithesis of circles made from lines. Also, circles arranged in lines (in the Central Fells) were reversed, as lines were being made into circles. The important thing here is the textual and intertextual dialogue that is occurring between the two main genres of rock-art carving in the county. Here, what can be described as Kristeva's vertical axis of intertextuality can be seen. Whilst the horizontal axis is the connection that exists between author and reader, the vertical axis is the connection that the texts have with each other (Kristeva 1980, 69). Thus, the monumental rock-art text, in the words of Kristeva is 'under the jurisdiction of other discourses (texts) that impose a universe upon it' (1980, 76). Thus, within the totality of texts in the Cumbrian 'canon', the monumental art is its ultimate expression-with the natural glacial scarring and, later, natural cup and line

marks, being its origin. Finally, before investigating rock-art and agency- and the production and movement of stone and slate in Cumbria and Jämtland in chapter 8- it is necessary to examine the role of power in connecting discourse (both genre and text type) to agency and structure, in a more general sense-along with its role in creating Neolithic identities, through the institutionalisation of the Cumbrian landscape.

5.5.4 Discourse of agency

The first part of this final section looked at the structure of rock-art in Cumbria, suggesting, in a purely ideological and abstract sense, that the basic underlying pattern and design grammar of the art was based either in cups or in lines. The next step was to look at how these structures were expressed through discourses, as a midpoint between structure and agency. Finally, this last section will deal with how discourses influenced agency, and how rock-art affected human dynamics, in a materialistic sense. Locating archaeological structures has more recently given way to agency centred archaeology (Brück 1999; 2001; Chapman 2002; Dornan 2002; Hodder 2012; Jones 2002; Pope 2007; Dobres & Robb 2000; Scham 2001; Shanks & Tilley 1989). The emergence of an agency centred approach served as a methodological tool to destabilise the rigidity of top-down static models. However, there is still a need to direct such approaches towards a theoretical reference point based in social theory, which serves to highlight the structure behind inequality and conflict in prehistory, -rather than the current trend which is to ignore or reject such research aims.

In terms of a critical discourse analysis, the fundamental question is whether Cumbrian rock-art is a projection of a dominating ideology, or the attempt of marginalised Neolithic communities in Central Cumbria, to negate an all-powerful Neolithic ideology. The simple answer is that this cannot be known. There is, however, certainly evidence of changing power relations after 4000 BC, or the start of the Early Neolithic in Cumbria. The growth of inequality and social competition seems to have been linked to change in people's conception of the

natural world- and their place in it (and perhaps was linked to ideas of ownership). Bradley and Edmonds (1993) have argued that in Cumbria, as well as in Britain generally, the effects of social change- such as the appearance of novel artefacts and the elaboration of existing forms- happened without a dramatic shift in the economic basis of society (Bradley & Edmonds 1993, 20). Thus, any shift was initially ideological and it was the creation of an ideology in Cumbria, separate from its economic base, that defines the beginning of the Neolithic in Britain. It may be argued, that stone axes and rock-art *are* an elaboration of existing forms; however, they are driven by ideological, rather than practical, reasons.

As a result, the possibility that the rock itself was loaded with symbolic meaning, during the Mesolithic and prior to any rock-art being placed upon it, should be considered. A synergy between the ideology of such objects and their economic base, during the Mesolithic in Cumbria, seems to have existed. This means that rock may have had a wider range of associations and connections to the people who used it, but this was on a more practical than ideological level. Therefore, there is evidence to suggest that during the Mesolithic and Early Neolithic, the rock and natural motifs found on the rock, was turned into an ideological resource. Furthermore, it can be assumed that the natural geography- lakes, mountains, rivers and rocks, may have been conceived (like many small scale societies in the present) as imputed with symbolic meaning (Scarre 2002; Tilley 1994; 1999; Van Gennip 1960). However, it was their association with ideology and the creation of social inequality and competition, which changed from the Mesolithic into the Neolithic. It could be argued, that this seems also to be the case in Cumbria, as the rocks and naturally occurring fissures seem to have actively been incorporated into the more simplistic motifs that are often found in their original landscape context- as an act of power creation.

5.6 Conclusions

In order to successfully facilitate the transition from structure to agency, the role of discourse and text- which lies conceptually and methodologically between the two extreme positions of structure and agency- was explored. The linguistic and textual metaphor was extended from rock-art to social action in the Neolithic, and showed that various discourses were created to help facilitate and mitigate social actions and power relationships. Moreover, for there to have been power relationships and discourses in the Neolithic, there had to be some form of inequality. Critical discourse analysis seeks not only to understand dominant and dominating discourses, but also those that are marginal. The collection, movement, production and ultimate exchange of stone axes out of Cumbria, led to the necessity to formalize power relationships and create institutions that defined the nature of social life- in a region that contained a much sought after resource (stone for axes). Therefore, the question remains as to what the main discourses of Neolithic Cumbria were-as expressed through rock-art.

Firstly, text type or genre played an important role in creating discourse. In the Central Fells, a slightly more complex set of discourses that, through a process of conventionalisation, united rock-art sites in that region. At its most basic and simplistic level, there was a dialectic -or dialogic- relationship between the two rock-art styles of the county. The main discourse of the Central Fells is the use and manipulation of cups, whilst in the east the same process occurs but using lines. Upon this basic discourse theme was the rock-art of Cumbria built. There are three main discourse themes; the cupping of (natural?) lines, the 'spilling' of cups and, most importantly, (in terms of quantity) the arrangement of cups into lines or motifs created from cups. In contrast, the convention surrounding what constitutes a discourse in Eastern Cumbria has a more limited repertoire, centred on the creation of circular motifs from lines, with some 'cupping' of natural lines. It has already been noted that complexity and higher numbers of rock-art motifs often led to a reduction in the number of motif types used at a site. On the other

hand, more simplistic sites tend to have had a greater variation of motif types; it is almost as if more complex sites have a more simplistic message.

If the Central Fells art was an elaboration of nature, then the rock-art of the Eden Valley is the manipulation of that elaboration. Here, a kind of Neolithic intertextuality was created. The creators of rock-art placed carvings on stone monuments- probably making reference to earlier rock-art of the Central Fells- by changing and inverting the main principles behind the carving; from making motifs and lines out of cups/circles to making circles out of lines. Thus, a process, or progression, of discourses that move from the natural to simplistic elaboration of the natural and, finally, to the manipulation of the elaboration of the natural, sees art work and human action become more and more abstracted and ideological over time. This issue will be discussed in more detail in chapter 7, which will look at the discourses created using the rock-art in Northern Sweden. However, before this can be achieved, the basic structure of rock-art in Jämtland needs to be outlined.

CHAPTER SIX

Northern Swedish rock-art I

6.0 Introduction

In the previous chapter, it was shown how the basic structure behind the artwork was played out as a number of discourses and dialogues between rock-art sites. In order to test the methodological approach outlined in chapter 3, it is necessary to apply the same processes, undertaken in Cumbria, in another region. The nature of the methodological approach undertaken, here, is that it should be possible to apply it to any other rock-art region, and possibly to any other period. For example, a comparison between contemporary San rock-art (from South Africa) and Neolithic Cumbrian rock-art may have been undertaken. However, this research has attempted to deemphasise ethnographic approaches to prehistoric rock-art, and, whilst such a comparison would be interesting, it is not suitable, here, since the basis of this research is to answer questions that surround prehistoric social processes. Thus, apart from showing that the methodological approach taken here has some validity, it is also important that some of the deeper questions- concerning the Neolithic in 'marginal' regions- can be answered. In a broader sense, the Neolithic 'package' (made up of stone tools, pots, pits and domesticates) needs to include rock-art in more marginal regions- from Scandinavia, Britain, Ireland, Western France and Iberia.

Furthermore, Bradley (1997) has compared the rock-art traditions from the British Isles, with those found in Ireland, Western France and Iberia. This research hopes to extend this comparison further northwards and eastwards. Although the rock-art from Britain and Scandinavia differs outwardly, both regions share similar wider social developments in relation

to changes in technology and the introduction of domesticates- during the Neolithic period- and, most importantly, rock-art.

This chapter will undertake the same processes as in chapter 4, but instead working with the Swedish material. Firstly, the rock-art needs to be situated within a number of sub-contexts (see Figure 6.1 below); environmental, human/environment interactions, and historical. The second section will outline current interpretations of the rock-art. It may be argued that there is a greater diversity in interpretive frameworks applied to Scandinavia's prehistoric rock-art with ethnographic, landscape and structuralist interpretations offered. This can, perhaps, help develop a broader understanding of British Neolithic rock-art, which is often interpreted by its landscape. The final section will begin to 'read' the rock-art narratives. The first part of this final section deals with the basic design forms of the rock-art in Jämtland, Sweden. The purpose is to define what the basic building blocks of this rock-art tradition were, in order to identify the art's underlying structural principles. Secondly, once the basic 'letters' have been established, the rules that determine their arrangement will be investigated. The final 'interpretive context' will be explored in chapter 7.

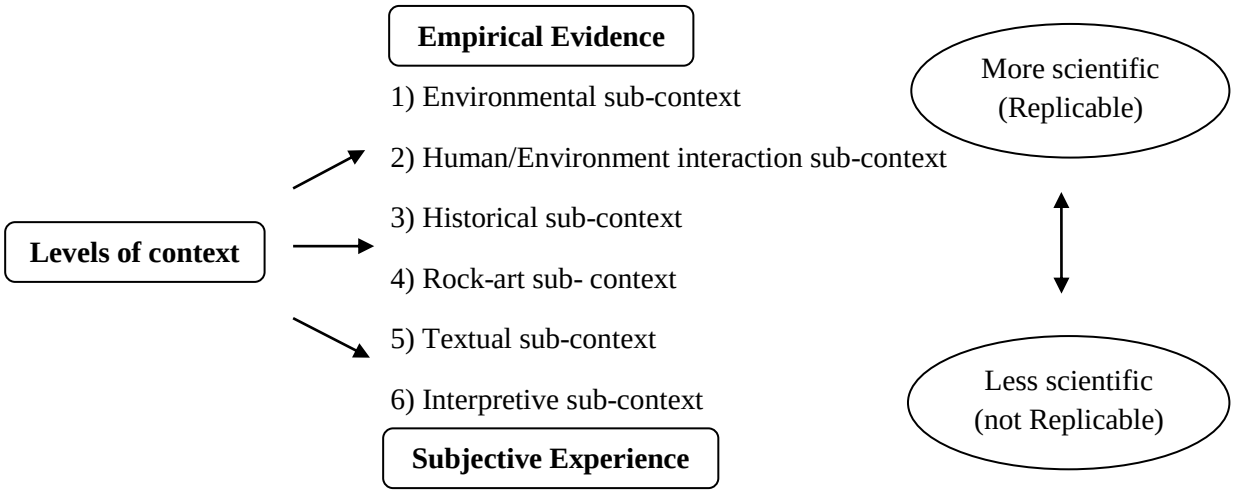


Figure 6.1 Levels of context divided into sub-contexts.

6.1 Environmental and historical contexts

6.1.1 Environmental sub-context: Jämtland before people

The colonisation of Scandinavia did not begin until the retreat of the ice sheets, during the Late Pleistocene (Larsen *et al.* 2006; Mangerud *et al.* 1996; Nakada & Lambeck 1988). As the ice melted, the sea inundated low-lying areas of Scandinavia, Finland, Estonia, and Latvia. Isostatic rebound resulted in further land surfacing, as the weight of the glaciers removed pressure from the earth's surface (Wahlström 1993; Walcott 1980). Only in the Southern Baltic was the dry land again flooded in the Early Holocene (Davies 2003; Karlén 1988). This led to changes in shorelines throughout the region, during prehistory-a process that still continues (Zvelebil 2006, 179). Therefore, Palaeolithic occupation in Jämtland and Northern Sweden was minimal due to the vast ice sheets that covered the northern land masses (Schild 1984).

The beginning of the Mesolithic in Scandinavia saw a rapid rise in temperatures by 5–6 °C- to around 15°C mean temperature, in July (Blankholm 2004). During the Atlantic period (ca. 6000–3000 BC) July mean temperatures were around 21°C (Zvelebil 2006). As temperature increased- and the ice retreated, during the late glacial- hunter-gatherer groups, following the reindeer, would have continually found that their former grazing grounds were lost to temperate forest. Furthermore, the Yoldia Sea (and later the Ancylus Lake) meant that much of Central and Northern Sweden was under water as the ice retreated- eventually creating the modern Scandinavian landscape, seen in figure 6.2. The isostatic rebound of

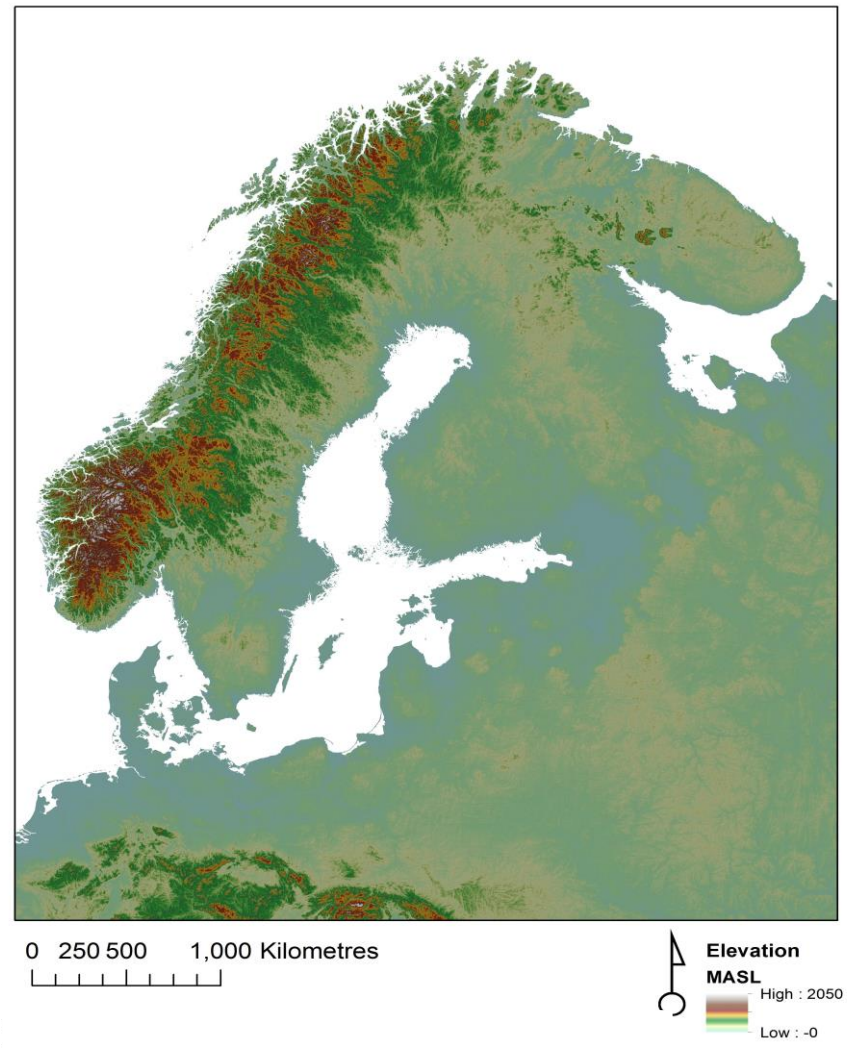


Figure 6.2 Topographic map of Scandinavia. Data Sources: Aster 30m Dem U.S. Geological Survey; NASA;ERSDAC.

Central Sweden was too slow in the early phase of post glaciation. This resulted in an inundation of the land by rising sea levels (Eronen *et al.* 2001; Lagerbäck 1978; Wahlström 1993). This meant that the precursors of the Baltic, the Yoldia Sea and the Ancylus Lake would have formed a much larger Gulf of Bothnia, between Sweden and Finland.

Eventually, isostatic rebound did allow the land areas to rise and what would eventually become Central Sweden and Finland began to take shape. Access from Southern Scandinavia, and the continent, was possible by a land bridge around a much larger Lake Vänern -or over

the Svea River (see Figure 6.3) (Björck 1995; Risberg *et al.* 1996). To the east, access to Northern Scandinavia could only be achieved by moving across the upper reaches of the Gulf of Bothnia, from Finland into Northern Sweden. However, water transportation across the Ancylus Lake must have been the easiest, safest and quickest route into the North (Emeis *et al.* 2002). Another direction, for people moving into Northern Sweden, would have been from the north and west of Norway (as it was during the Later Upper Palaeolithic). During the Mesolithic and into the Neolithic, a point of contact between the Atlantic west and the Baltic east would have been across the regions of Trødelag in Norway, and Jämtland in Sweden (Bang Andersen 1996; Indrelid 1975; Mikkelse 1975). Thus, from this time onwards, the Jämtland/Trødelag corridor would have been an important migration route.

The mountainous fell landscape (*fjell* Norwegian or *fjäll* Swedish) of modern Central and Northern Sweden is relatively modern, and occurred as the result of lower temperatures since the 1st millennium BC (Clark 1975, 234; Joakim 2011). Before this time, forest would have been found far into *Norrland,* and also at higher altitudes in the Scandinavian mountains than today. Therefore, a very different landscape would have existed. The barren tundra of exposed, open landscapes -with bleak, high mountains suited only to semi nomadic reindeer hunting, or herding in the far north-would have looked quite different. The dominance of pine and birch in the pre-boreal period (8,300–7500/7300 cal. BC), gave way to pine and hazel in the boreal period (7500/7300–6000/5500 cal. BC), mixed oak forest of elm, oak, lime and beech in the Atlantic period (6000–3000/2500 cal.BC), and a more mixed broadleaved/conifer forest in the cooler, more arid sub-boreal period (3000/2500–500 cal. BC) (Bailey & Spikins 2008; Zvelebil 2006, 179). Elk, game birds and fur bearing animals would have lived in the forests, whilst salmon and other fresh water fish would have populated the rivers, with seal living in the Gulf of Bothnia.

Figure 6.3 The Ancylus Lake and land bridge north at Svea älv (river). (Retrieved from http://files.myopera.com/nielsol/blog/Ancylus_lake.jpg [Accessed 18th February 2014].

6.1.2 Human/environment interaction sub-context

The lithic evidence is far less substantial outside Southern Scandinavia. As early as the 6th millennium BC, there is a spread of lithic technology from Sweden's west coast, which consists of microflakes, small round and long keeled scrapers. Also, the finds from Härjedalen, of

Southern Scandinavian flint, suggests a high level of transhuman activity, around Lake Vänern, during this period. The Lihult type of stone axe moved from their west coast source- either side of Lake Vänern- to the east in Västergötland, and north east in Västermanland (Southern Sweden) from around 6500 cal. BC (Sjögren 1991). Lihult type axes are also found in occupation sites in *Uppland* accompanied by stone butted axes, also further north in Torsångs parish, Dalarna and Rörösjon in Central Jämtland (Janson *et al.* 1962, 4).

As a result, the population of Southern Norrland- including Jämtland- seems to have had a southern, rather than an eastern origin, as the Lihult type of axe (figure 6.4) is rare in Finland, which is dominated by stump butted axes (Clake 1975, 239). The final phase of the Mesolithic Lihult corresponds with the Southern Scandinavian Ertebølle, between 5000 and 3000 cal. BC (Tilley 1996b, 11). Bengtsson (2003) highlights the pattern of distribution of Lihult axes across southern parts of Sweden, and shows how their distribution combines exchange, at regional and long distance scales (Bengtsson 2003, 389). A similar pattern of regional and inter regional exchange can be seen in the tufftite and quartzite handle cores of Southern and Northern Norrland (Knutsson *et al*. 2003, 422–442; Olofsson 1995; Zvelebil 2006, 183). Therefore, a wide network of exchange was already established during the Mesolithic-not only in terms of stone, but also of ideas that would have become more intense as the Neolithic developed to the south.

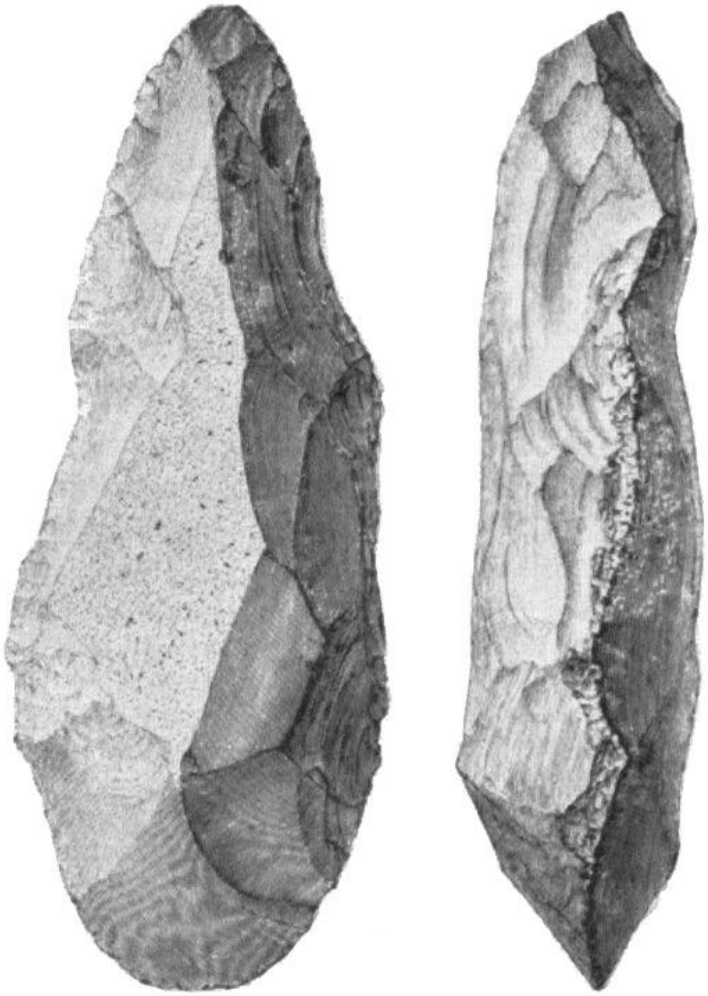


Figure 6.4 Lihult Axe core. (Retrieved from www.runeberg.org/nfcf/0685.html) [Accessed 18th February 2014].

6.1.3 Historical sub-context: Neolithic in Central Western Scandinavia

The Neolithic process of Southern Sweden is well documented in English (Bradley 2002; Fornander *et al.* 2008; Lidén *et al*. 2004; Malmer 2002; Tilley 1984; 1996b).In Northern Sweden, however, the Neolithic, transitional processes are less clear. As a result, the use of Norwegian evidence (figure 6.5) can help fill in the gaps- since, geographically, Jämtland shares more in common with Norway than Southern Sweden (the fact that until 1645 Jämtland was part of Norway further emphasises this point). Prescott (1996) has divided the Neolithic in

Norway into an Early Neolithic, Middle Neolithic A (3900-2800 cal. BC) and a Middle Neolithic B- or the 'battle axe' phase (2800-2400 cal. BC). The Late Neolithic (2400-1750 cal. BC) was a period when agriculture and pastoralism become very much part of the landscape-although only in the south. Prescott suggests that the Late Neolithic is, in fact, more of an early metal age, and is closely tied to the Beaker period-which is part of the EBA rather than truly Neolithic (Prescott 1995, 127; 1996, 78; Prescott & Walderhaug in press). Thus, technical and cultural innovations seem to have stopped for about 1500 years in Norway and Central Sweden (Prescott 1996, 77)-with the only evidence of agriculture and/pastoralism being found in the south of Norway, around Øslofjord's low lying land and milder, drier climate.

To the north and east of Norway, hunting and gathering seems to have endured. The evidence from Norway shows that 'Neolithic' sites produce evidence of mostly hunting and fishing equipment, until the Late Neolithic (2400 cal. BC) onwards. This suggests that changes in technology did not translate into changes in subsistence. The evidence suggests that during the Early Neolithic and Middle Neolithic A in Norway, no agriculture was practiced (Prescott 1996, 79) outside Øslofjord. Thus, no significant change from the Mesolithic to the Middle Neolithic can be seen in the Norwegian evidence, and it can be assumed that this was the same for Jämtland as well. The extremely rare finds of cereals can be explained either by mixed layers or the assignment of bones as domesticated, which are, upon closer examination, wild species; since the archaeologists cannot guarantee the context of grain samples at complex multiphase sites (Prescott 1996, 82-83). The evidence from Norway can be extended into Jämtland to show that the region was a hunting area where slate was quarried and worked, along with a subsistence based on wild animal resources such as elk and beaver. The evidence shows us that the Neolithic period in Northern and Central Scandinavia should be rooted in a hunter-gatherer culture, but with an additional development of exchange networks over large distances, at this time.

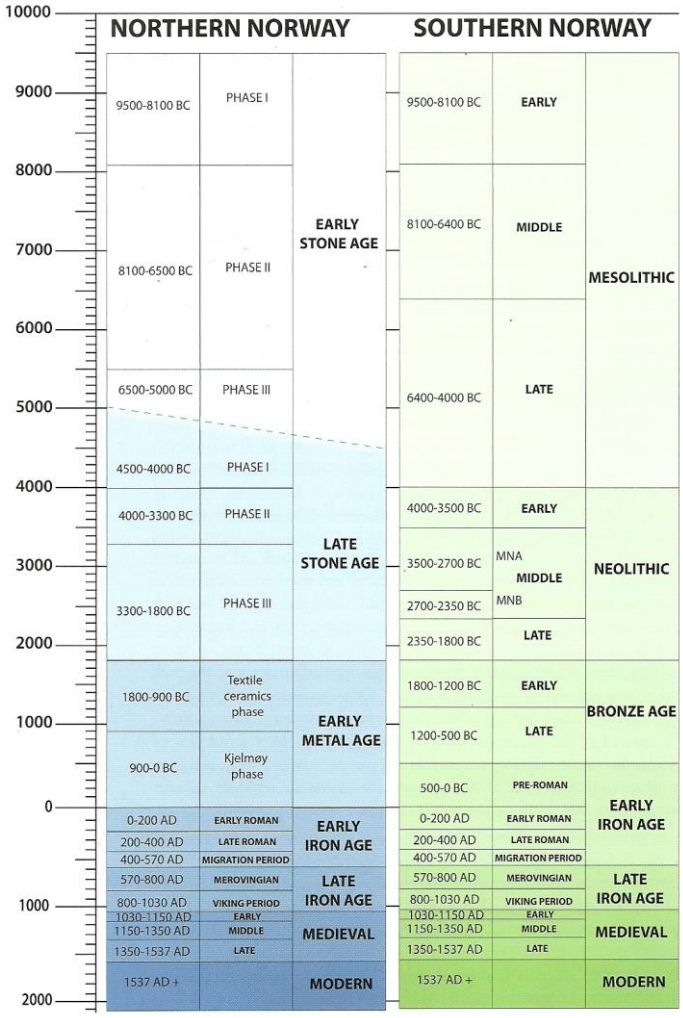


Figure 6.5 Post-glacial chronology of Norway (Lødøn and Mandt 2010, Figure 8).

To further complicate this issue, certain regions in Scandinavia can be defined as transitional zones between Neolithic ideologies moving from the south, and local hunter-gatherer occupation to the North. Centrally located regions like Jämtland, which lie along a natural route way between the Norwegian Atlantic and the Baltic, would have been one such interaction zone, between hunters and farmers. The first such groups were the TRB (4000-2700 cal. BC) archaeological culture, whose northern limits of agriculture and occupation, formed a boundary beyond which the communities did not (or could not) adopt farming. The communities above this 'frontier' in Jämtland (and other northern regions) are grouped together as the 'Slate

Culture' (Almgren 1912; Brøgger 1909; Hallgren 2008), who collected their slate from quarries in Jämtland (Hallgren 2008; 2012). In Eastern Sweden, the regions of the Baltic saw a transition to agricultural activity begin around 4500 cal BC, and continue until 2500–500 cal. BC (Antanaitis 2001; Bramanti 2009; Daugnora and Girinkas 1995; Zvelebil 1981; 2003; 2006). In Ångermanland county, the earliest cereal type pollen dates to ca. 1700 B.C. at Judesjrn, and comparable finds of single cereal type pollen are recorded from Norrbfle, 70 km north of Judesjfn, and were dated to 2500-2000 cal. BC. (Huttunen and Tolonen 1972). In Northern Västerbotten (about 250 km north of Ångermanland) pollen evidence dated to 1500 cal. BC. This pollen type was argued by Wallin, to either have been transported from further south, or alternatively derived from small-scale agriculture in Norrland (Wallin 1996, 307).

Due to changes in climate throughout prehistory, this agricultural 'frontier' changes its location during warmer and dryer weather periods, when the frontier will move north; during colder wetter periods it will move further south. However, there is an east west dynamic due to the warming effects of the Baltic. The east coast of Sweden, along the Gulf of Bothnia, has a coastal area of more than 700 km, with a major climatic gradient from south to north. In many ways, the coastal region represents a transition between a lower lying coastal region -that is suitable for agriculture- and the hinterlands, where farming and pasturalism becomes uneconomical/not possible. Thus, the spread of farming is possible further north, along the coast, due to the warming effects of the sea and the higher, lower lying temperatures. The province of Ångermanland has often been regarded as a transitional area between Southern and Northern Norrland. Ångermanland has a favourable climate (longer growth period, higher average annual temperature), in comparison with the adjacent regions in the north and west, closer to the Norwegian border and the mountains. Fertile soils are present in the valley of the large river Ångermanland. Many plant species reach their northern limit of distribution here (Wallin 1996, 301). The Provinces of Ångermanland, Jämtland and Härjedalen represent the upper limits of

agricultural and pastoral economies; beyond this point, wild food dominates-as did the technologies of the Mesolithic, which were more suited to hunting and fishing. It is also significant that, here, the largest and most complex hunter's rock-art site at Nämsforsen- and additional rock-art sites in Jämtland- can be found. It is more than likely that the 'slate culture' peoples were responsible for rock-art of the hunter's tradition in Jämtland. It is the interaction between these two groups that is important to investigate further.

The Skogsmossen site in Värmland province, close to the largest lake in Scandinavia (Lake Vänern), provides evidence of such contacts between the Slate culture and the TRB groups. This site is the most northern TRB site in East Central Sweden, and consists of a settlement site and a small fen, used to deposit ritual offerings. The material culture here consists of 155 fragments of TRB funnel beakers, collared flasks and clay disks; 35 greenstone/flint axes, 25 hand querns, charred cereal grains and, interestingly, red and green stone slate knifes (figure 6.6) from quarries in Jämtland (Hallgren 2010, 4). Slate knifes have also been found as far south as *Skåne,* in Southern Sweden (Hallgren 2008; 2012), which suggests that their movement from the north to the south was an important part of the Neolithic in Scandinavia. Whilst all the other objects can be viewed as part of the TRB répertoire, the slate knifes must have come from contacts with hunter groups who moved between the Baltic, the central mountains, the quarries in Jämtland and the production sites in Trøndeg, on the Atlantic Norwegian coast.

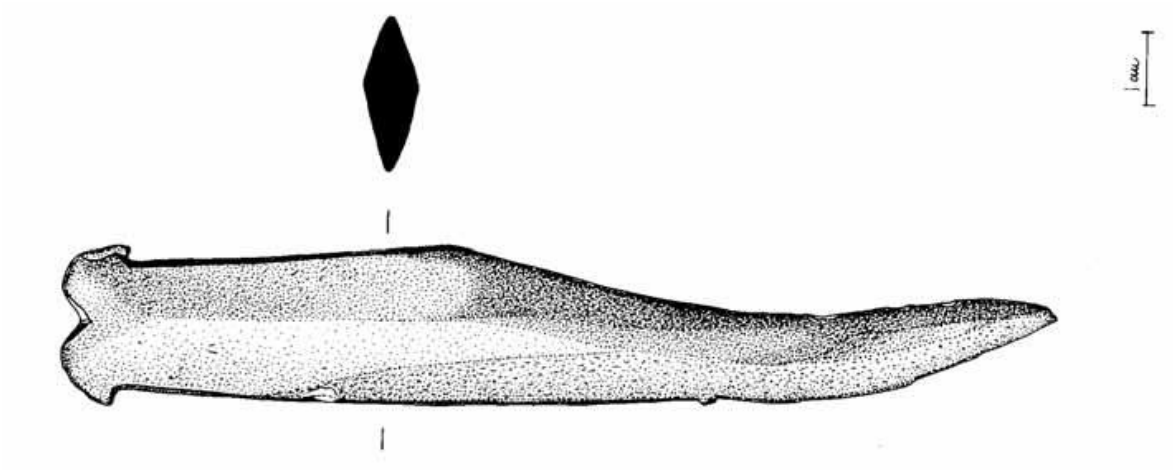


Figure 6.6 Banded red and green slate knife found at Skogsmossen in Västmanland, Sweden. (Hallgren 2010, Figure 2).

The sequence of events in Central Scandinavia- in the early part of the Neolithic- suggests that during the Early Neolithic (4000-3300 cal. BC), local hunter-gatherer groups' acquired knowledge of agriculture- transforming them into the TRB. Alternatively, they may have been replaced or pushed out by different peoples of the TRB group, coming from the south (Malmström *et al.* 2009). To the north, communities still maintained a hunter-gatherer existence. After 3300 cal. BC, there is some evidence of husbandry and cereal cultivation, above this northern limit (Østmo 1999). Furthermore, a profound change (possibly climatic) took place, whereby all internal inland sites were abandoned and relocated to the coast or archipelagos. The osteological evidence (Olson 2008; Storå 2001) suggests that hunting and fishing made up a significant part of the diet. Here, there is evidence of inland farming in the Early Neolithic being abandoned. This development seems to be linked to the emergence of the Pitted Ware Culture.

The Pitted Ware Culture (PWC), which dates from 3200 cal. BC (Burenhult 1999, 277) and, with later evidence suggesting a main phase of 2700-2600 cal. BC (Welinder & Griffin 1984; Wyszomirska 1986), replaced the TRB of the Earlier Neolithic, in Central and Eastern Sweden.

From the Middle Neolithic, the coast seems to become a focus of activity- perhaps due to changes in climate leading people to move closer to the sea, for its warming influences (especially during the winter or colder and wetter phase). Here, the TRB and PWC coexisted for a few hundred years, in Central Sweden (Edenmo *et al*. 1997; E. Fornander *et al*. 2008; 286). Interestingly, during the first phases of the Middle Neolithic A (3300-2700 cal. BC), along the east coast of Central Sweden, some TRB groups remained in these areas. The Middle Neolithic B (2700-2300 cal. BC) marks the emergence of the Battle axe culture located on inland sites, with a new type of battle axe, pots, sheep/goat bones and individual flat grave inhumations (Edenmo *et.al*. 1997). Thus, from this period, two different Neolithic lifestyles- the Battle Axe culture and the PWC- existed. However, it was the interaction between these Neolithic groups- with the northern hunters of the Slate Culture-who made the red and green-banded slate knifes (figure 6.7), which seems to have been the driving force behind the creation of rock-art in Northern Scandinavia.

Figure 6.7 Red slate knifes from Nämsforsen (Goldhahn 2010, Figure 8.5).

6.2 Rock-art sub-context

Having discussed some of the general dates for the Neolithic in Northern Scandinavia, it is necessary to look that the date of the rock-art. The dating of rock-art is difficult, with many problems and limitations. The most common method, in this region, is shoreline dating and is sometimes seen as an alternative to the chronological typologies and stylistic comparisons developed in the 1930s (still a major dating method (Ling 2008; Sognnes 2003)). As discussed in chapter two, the main critique of such stylistic comparisons (developed by Gjessing (1932), Hallström (1938) and Ravdonikas (1936)) is its evolutionary premise and development of style from the naturalistic towards the schematic. Furthermore, whilst there may be little consensus over the art's evolution, there does seem to have been a general trend from larger game animal depictions towards smaller motifs- but a larger variation and artistic repertoire (Gjerde 2010, 59). Thus, the main change is that before 5500-5000 cal. BC all rock-art in Scandinavia is naturalistic in size, as well as the images- which are all animal based- whilst, by the Later Neolithic there is the introduction of human activities and cultural objects at rock-art panels.

Since there is very little research in the province of Jämtland, Nämforsen can help provide the best chances of dating the rock-art here. The production of art, here, was linked to the huge quantities of red ochre, which date from 4200-2400 cal. BC. This suggests that it was between these two periods that the art, linked to the ochre production, was created (Larsson *et.al.* 2003). Hallström originally dates the carving to the Late Neolithic (Hallström 1960, 372), however, given the fact that the earliest boast motifs in Northern Scandinavia are dated to at least 5000 cal. BC (Gjerde 2010, 389) we may expect that most of the art at Nämforsen- and by extension in Jämtland- could be from the first phases of the Late Stone-Age after 4200 cal. BC. Figure 6.8 shows a number of various dates for the main activity at Nämforsen. The final two authors, Malmer (1981) and Burenhult (1999), along with Tilley (1991), suggest that the boat carvings

are a reflection of Bronze-Age trade and movement. However, given that boat motifs originated in Early Neolithic Norway, this suggestion needs to be questioned.

Lindqvist (1994)	4200 cal. BC with a second 3000 cal. BC phase.
Baudou (1995)	4000 cal. BC to the Middle Bronze age
Ramqvist (1992)	3000-1500 cal. BC
Forsberg (1992)	3000-1500 cal. BC
Malmer (1981)	Bronze age
Burenhult (1999)	Bronze age

Figure 6.8 Suggested dates of Nämsforsen site by various Swedish authors.

Returning to the rock-art of Jämtland, Glösa (figure 6.9) lies 145km to the west of Nämforsen, contains 30 or so elk depictions and some geometric shapes, which Gjerde suggests many be hunting pits (a common feature of this part of Sweden) that were used to kill elk, as they fell in. Gjerde suggests that some of the geometric motifs, here, may be representations of the hunting pits, as seen from above (Gjerde 2010, 432). This site was first linked to the practice of driving elk over cliffs, by Wetterberg (1845) (there is historical and ethnographic evidence for this). Dating, possibly, to the Earlier Neolithic (Baudou 1995; Forsberg 1993, 228) this site is interesting as it is located close to a large hunting pit system, containing over 100 deadfall pits, which continue for about 6km between Lake Näldsjön and Lake Alsensjön (Gjerde 2010, 431). This seems to strengthen the hunting magic interpretation, although it is not possible to date the elk hunting pits, which may be later than the rock-art itself. Jensen has emphasised that this region of Jämtland is very good for elk hunting, as it is located on an elk migration

route (Jensen 1989, 208). There is also settlement evidence from around Lake Näldsjön, which suggests that the art may be linked to settlement activity and hunting.

Figure 6.9 The left hand photo shows the steepness of the cliffs and the location of the rock-art. The photo on the right shows the carvings at the top. (Gjerde 2010, figure 11).

The site of Gärde (Figure 6.10) is associated with the large and naturalistic-styled polished art, which is found just over the border in Norway. Along with another similar site at Landverk in Jämtland, Forsberg argues that the stylistic characteristics of this site suggest that it may be Mesolithic or Early Neolithic (Forsberg 2000, 68). The rock-art's connection to Northern Norway is further emphasised by Gjerde, who identified that the polished stone motifs compare with those at Ofoten in Nordland, Norway (Gjerde, 2010, 389). The shoreline dating of similar sites, in this area of Norway, is 5500-5000 cal. BC, and if there is some connection in style, then the Gärde site may date to a similar time period. Interestingly, art created before this period tends to be morphologically correct. Thus, if the art from Glösa is compared with that of Gärde, then the former -which is more naturalistic- actually may date to before this period.

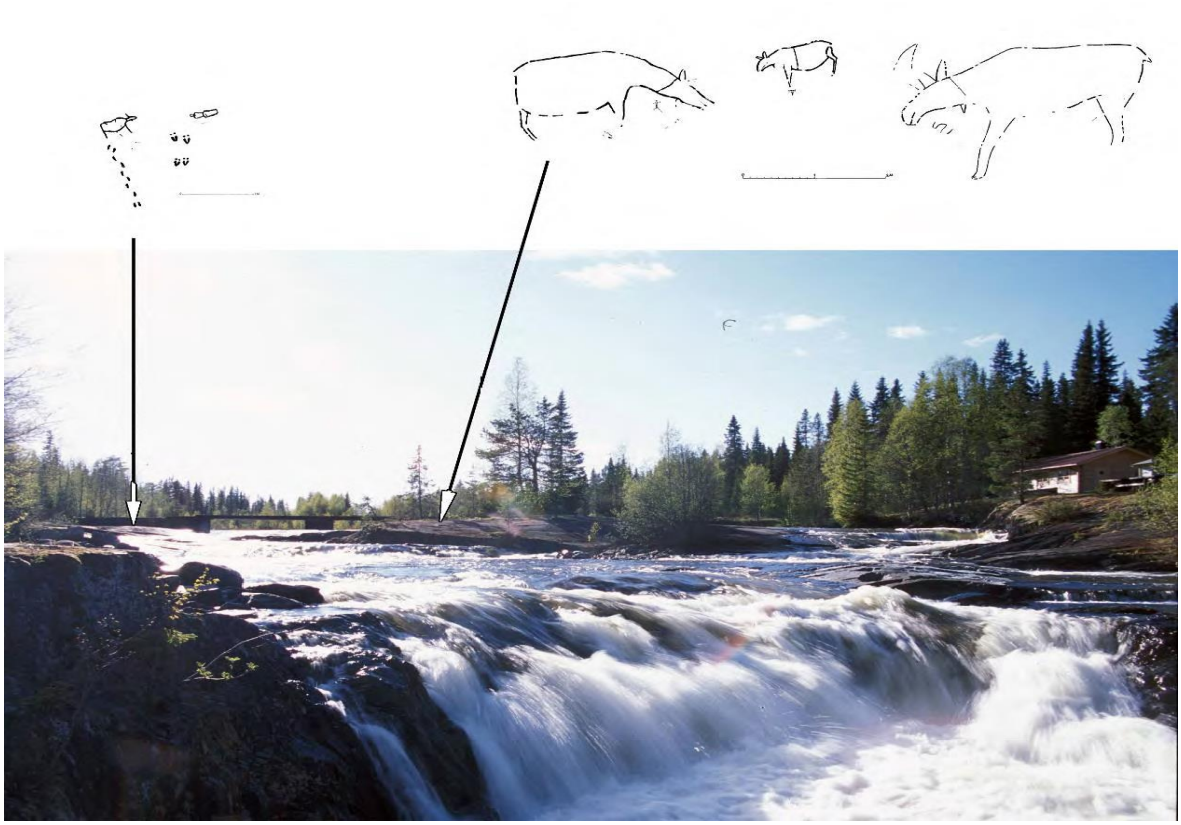


Figure 6.10 The location of the Gärde sites in relation to the rapids. (Gjerde 2010, figure 279).

Flatruet (Figure 6.11) in Härjedalen (just outside of Jämtland), was perhaps one of the first sites to, not only be compared internationally, but also to be interpreted ethnographically, as well. Olsson found that the paintings found in this part of Sweden had many similarities with Russian rock-art painting sites. Furthermore, he noted that there existed a similarity between the style of elk paintings on the rock, and the images painted upon Saami drums (Olsson 1898, 55-59; Gjerde 2010, 24). This site is also interesting since, it has been suggested by Hansson, a number of broken arrow heads found here may have been fired at the rock-art intentionally-perhaps as part of some hunting rite (Hansson 2006). Finally, perhaps the most interesting aspect of this site is the way in which the motifs can be seen to move into and out of obvious cracks in the stone.

Figure 6.11 The Flatruet site, which shows how the animals interacted with the rock below (Gjerde 2010, figure 292).

Building on Lewis-Williams & Dowson (1990), the surface underneath needs to be seen more as an interface between what was on this side and what lies beyond. In Figure 6.11, the art seems to have been purposefully placed to show the elk moving into and out of the rock.

The carving site at Landverk, Jämtland (Figure 6.12), was first studied by Olsson in 1891. The large and naturalistic elk figures, at Landverk, suggest that this site is Early Neolithic (Forsberg 2000, 68; Hallström 1960, 52). An interesting feature of this site is that the elk seem to be drinking from the edge at Lake Ånnsjön; Hallström was probably the first to observe the interaction between rock-art motifs and the natural world (Hallström 1907, 222; Gjerde 2010, 32). Indeed, Hallström further speculated that this interaction may be part of many rock-art stories as " many such pictures which have been drawn by nature herself have attracted the attention of the Lapps, by whom they have been worshipped as, in some way or

other, connected with their deities or myths" (Hallström 1939, 19).

Figure 6.12 The drinking elks at Landverk (Gjerde 2010, 15)

Moreover, this site seems to share a common tradition with North West Russian sites like Kanozero and Onega, of depicting elk 'drinking' from the water's edge. The location of the motifs- at the water's edge- at these sites, strengthens the shoreline hypothesis that is so vital for dating Scandinavian rock-art. Interestingly, the motifs at this site are not visible from the land, but only from the water (Gjerde 2010, 406)

6.3 Quantitative analysis of Jämtlandic rock-art

6.3.1 Introduction

In chapter 3, the case for locating meaning in rock-art was made. This chapter will attempt to analyse the art in order to locate the underlying principles that structured its arrangement, and how the basic design forms created meaningful Neolithic narratives.

6.3.2 General geographical character of Jämtland

Jämtland province (Figure 6.13)- which is comparable, in size, to Ireland, and with only 112,000 inhabitants-is bordered, in the west, by the Skanderna- or the Scandinavian mountains that run along a, roughly, north-south axis. The mountainous terrain branches inland in the very south of the province, towards the southeast. The western mountainous landscape is interspersed by large valleys, many of which have been used as major routeways -from the earliest prehistoric periods up to the Middle Ages, when moving between the Atlantic and the Baltic. Although not the highest Swedish province, in terms of topography (which is Lapland), Jämtland does contain some of Sweden's highest mountains (for example, Storsylen at 1762 meters).

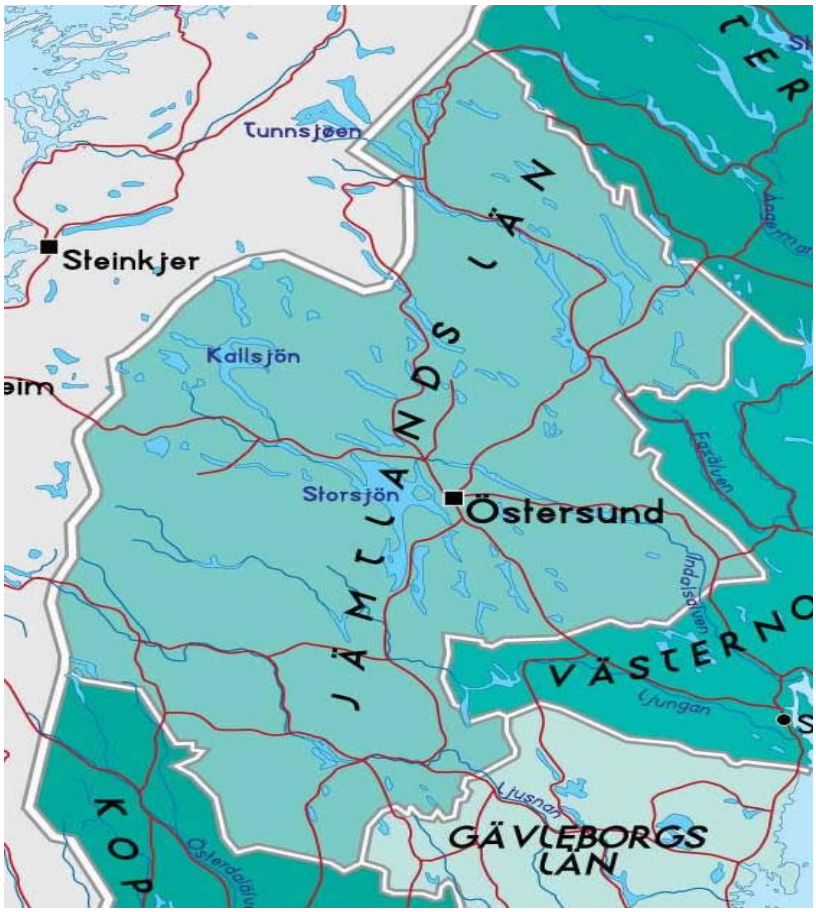


Figure 6.13 The county of Jämtland, Sweden (Retrieved from http://www.embassyworld.com/maps/Maps_Of_Sweden/images/jamtland.jpg *[Accessed 11/2/15]*.

On the whole, Jämtland is a region of mountains, valleys, rivers and lakes. Flowing from the Scandinavian mountains in the west, are the large rivers Indalsälven and Ljungan- towards the Baltic, which would have been natural prehistoric route ways across the Scandinavian peninsular. To the north of Jämtland there are the tributaries of the Ångerman River, which are the site of Northern Sweden's most important rock-art site at Nämsforsen. Moving away east and south of Jämtland- from the mountains- the land surface becomes less mountainous, with many lakes forming in the low lying land. The large Storsjön, or 'big lake' (one of the largest in Sweden), sits in the centre of Jämtland. Further to the east, the land becomes, again, slightly hilly (although not to the same extent as the west) which then runs out of the province towards the coastal archipelago that runs along Sweden's Baltic coast.

In the Neolithic, as today, precipitation levels would have been higher in the mountainous west, with dryer conditions in the east- due to the rain shadow effect of the Scandinavian mountains. This has the effect of creating extremes in climate, between excessive rain and winter snow in the west, and very low levels of rain and snowfall towards the east- as the maritime air currents are effectively blocked from moving further west. Furthermore, it should also be noted that this region contains the northernmost limit of the temperate mixed forest, transitioning into boreal taiga to the north.

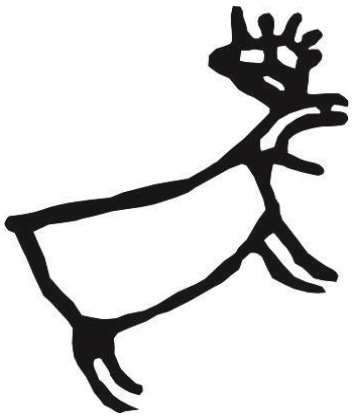
6.3.3 Quantitative rock-art methodology

The basis of this chapter is a quantitative analysis of the rock-art found in Jämtland. In order to do this a number of steps were undertaken. Firstly, copies of the rock-art transcripts made by Hallström (1960) were made and redrawn in Coreldraw. The second step was to identify the main motif types of this region, which formed the main classifications of rock-art in this area. These motifs were further classified into sub-classifications that recognised that the main design forms (elk, humans and other animal species) were further divided and contrasted in the minds of the carvers, as part of their attempt to create meaning. Elk were classified according

to movements and sex; whilst human motifs were classified according to sex. These two design groups are the main focus of the rock-art in this region and, thus, required sub-classification. The less common motifs, such as other or indistinct animals, blotches/lines, sea motifs and tracks, were treated as a whole. Finally, the total numbers of each motif class was recorded and any combinations of design elements collected. However, it should be noted that the complicated combinations of motif classes (an important part of Levi-Straussian structuralism)- where all possible motif combinations are made into a table to show which combinations did or did not occur- was avoided in favour of a more general and descriptive, textual approach to this issue. As a result, combinations of design groups will be further explored in more detail in chapter 7, as part of the discourse analysis section.

6.3.4 Jämtlandic rock-art: Basic design forms

An analysis of the rock-art sites, from Jämtland, identified seven main classifications of rock-art motifs. Each class was further sub-divided into sub-classifications that reflected the complex nature of the main design elements. The seven classes are elks, other animals, human figures, sea/water motifs, indistinct/unfinished animals, lines and blotches, and tracks. These main classifications were further sub-divided to show more detailed information; elks (due to their large number) were divided into male or female, moving or stationary and small or large. Human figures were only sub-divided into male, female or unknown.



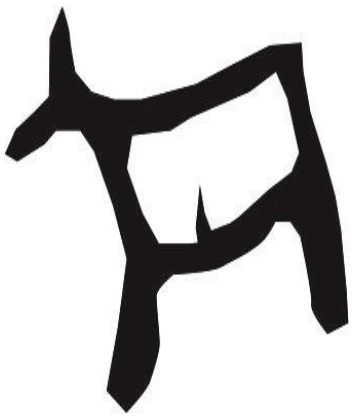


Figure 6.14 Group 1 elk male and female.[2]

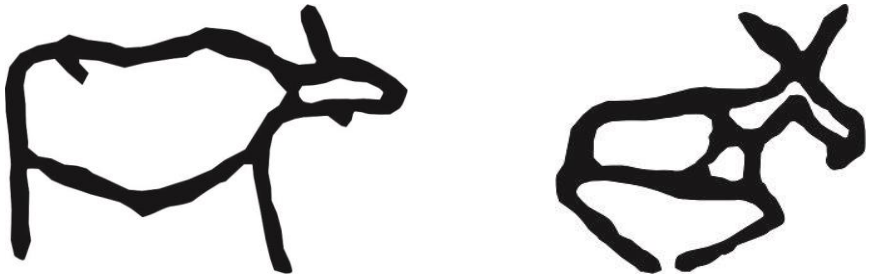


Figure 6.15 Group 1 elk stationary and moving.

Figure 6.16 Group 1 elk small (under 1 m) and large (over 1m).

Figure 6.17 Group 2 other animals.

[2] All images adapted from Hallström (1960)

Figure 6.18 Group 3 human figure, male, female and gender unknown.

Figure 6.19 Group 4 Sea/water motifs.

Figure 6.20 Group 5 indistinct/unfinished animals.

Figure 6.21 Group 6 lines and blots.

Figure 6.22 Group 7 tracks.

6.3.5 Design relationships of rock-art in Jämtland

All rock-art sites (Figure 6.23) contain elk and, like other Northern Scandinavian regions, their ritual, symbolic, social and economic importance, cannot be overstated. The largest number of elk is found at Glösa and only contains one other design element of lines/blotches. Flatroet contains the second highest amounts of elk, but also has humans and other animal motifs. Skarvången, Hästskotjärn and Gärde have a larger variety of motifs than the other sites that have a higher total amount of motifs.

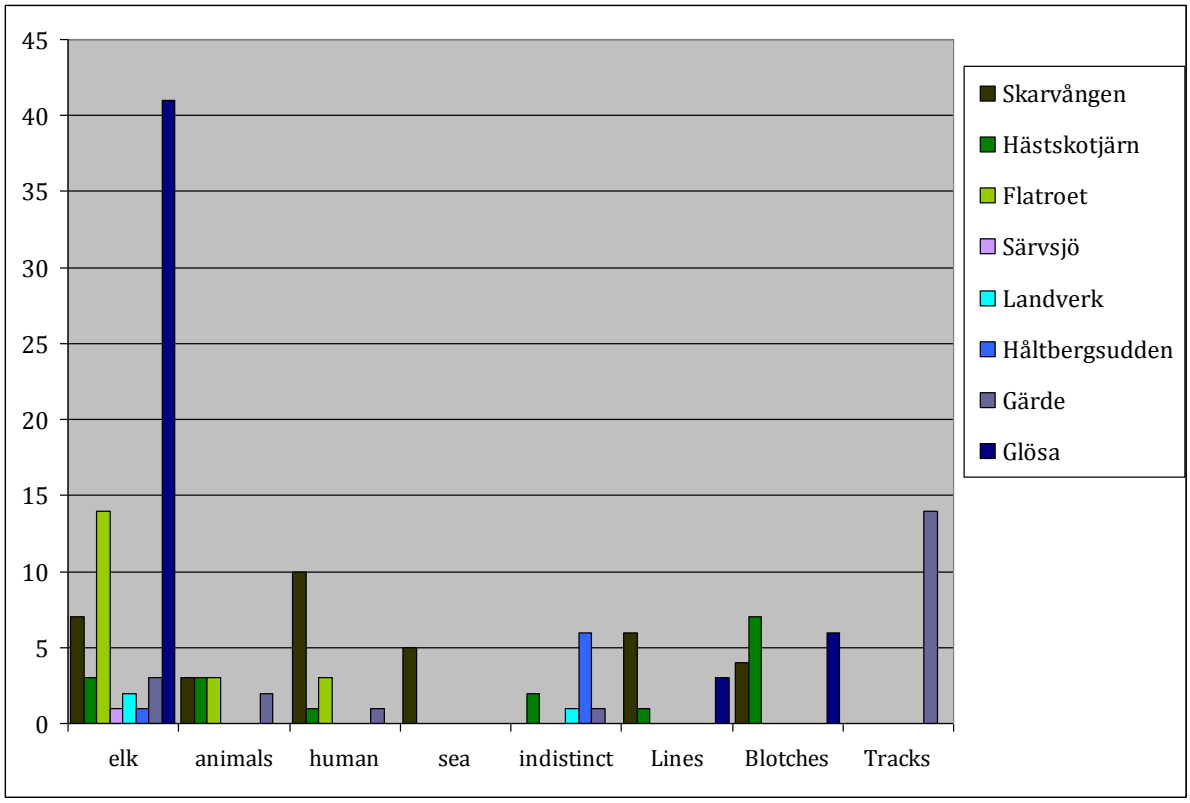


Figure 6.23 All motif types and relative values.

In Figure 6.24, both painted and carved motifs in Jämtland are grouped together. This shows that elk, above all other motif types, are the most common motif type- at both painted and carved sites. Lines and blotches are also relatively common, but all other motifs are rare and show similar values. Sea/water motifs are found only at one site and, thus, represent the least common motif type. It is interesting to note that the other motif types are not as important. For example, human representations are few- as well as other animals and shapes. The desire to show the elk, as opposed to other motifs, perhaps suggests that the animal had a social importance beyond humanity, and other mammal species. In effect, the other motifs, through their marginality, only serve to place more emphasis on the elk. However, they were still carved and painted and, thus, were also significant- even if their only purpose was to emphasise the importance of the elk. After all, if the carvers wished, they could have drawn only elks. The

decision to draw mainly elks and a smaller number of other representations is, therefore, significant.

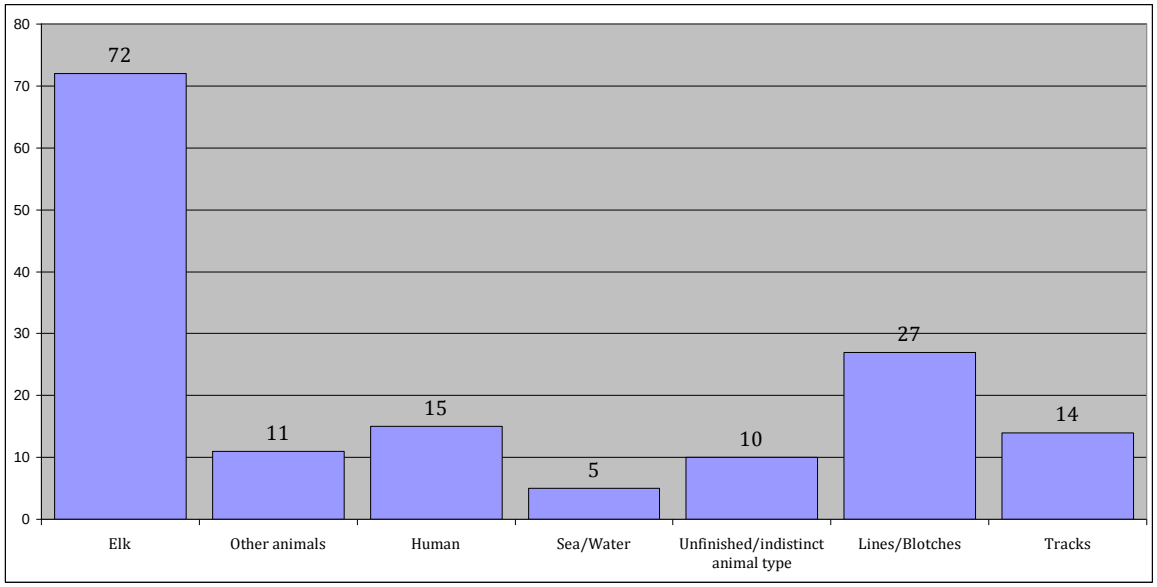


Figure 6.24 Total numbers of motifs in Jämtland per category.

The percentage of identifiably male elks is much smaller than female elk- as can be seen in Figure 6.25. The figures from Jämtland support the analysis undertaken by Tilley (1991) that shows that female elks also dominate the site of Nämsforsen. Tilley's analysis of the art is based upon his classifications of the motifs, to show that, in the majority of cases, elk are female, whilst boats are male (1991, 68).

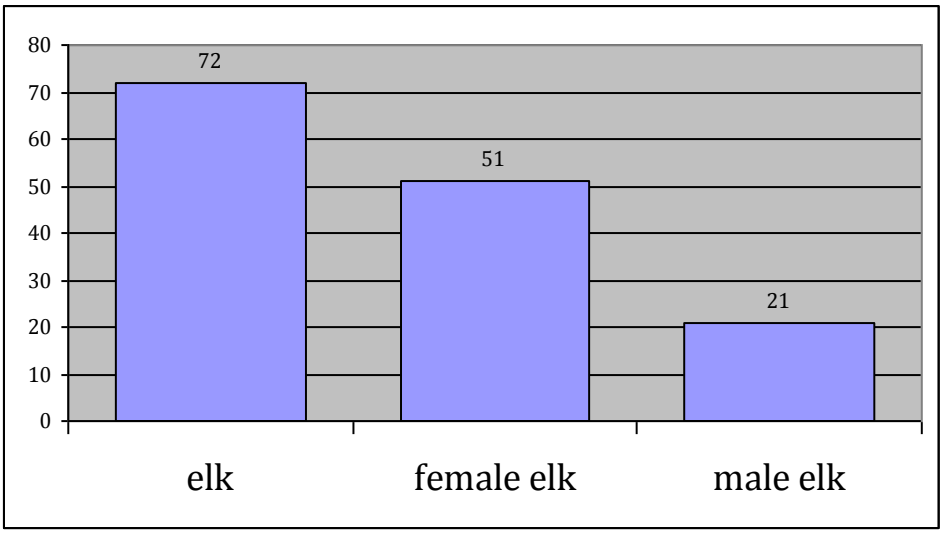


Figure 6.25 Total elk, female elk and male elk.

This leads to an issue that was discussed in relation to Nämsforsen, but needs to be addressed now in Jämtland-whether the elk are female or male. The absence of antlers was used, by Tilley, as a criteria for femaleness; however, between December and May, the male elk lack antlers too- but all male elk do have a chin tuff. Tilley's response (Clotte *et. al.* 1993) to criticism of his earlier work at Nämsforsen shows that no more than 15-20 percent of the elk have the chin tufts. Thus, most elk are female, and the fact that there are male elk could be argued to have served to emphasise the femaleness of the elks. However, unlike Nämsforsen, Jämtland lacks the large number of boats, and, it is suggested, that the other animal motifs may have had this female function here. This issue will be explored in chapter 7.

Figure 6.26 shows that Skarvången, Hästskotjärn and Flatroet have the highest concentrations of elk motifs after Glösa. The other sites have roughly the same relative numbers of motifs - both of male and female except for Glösa- but, then again, this site needs to be seen as special, due to the fact that male elks can be found here.

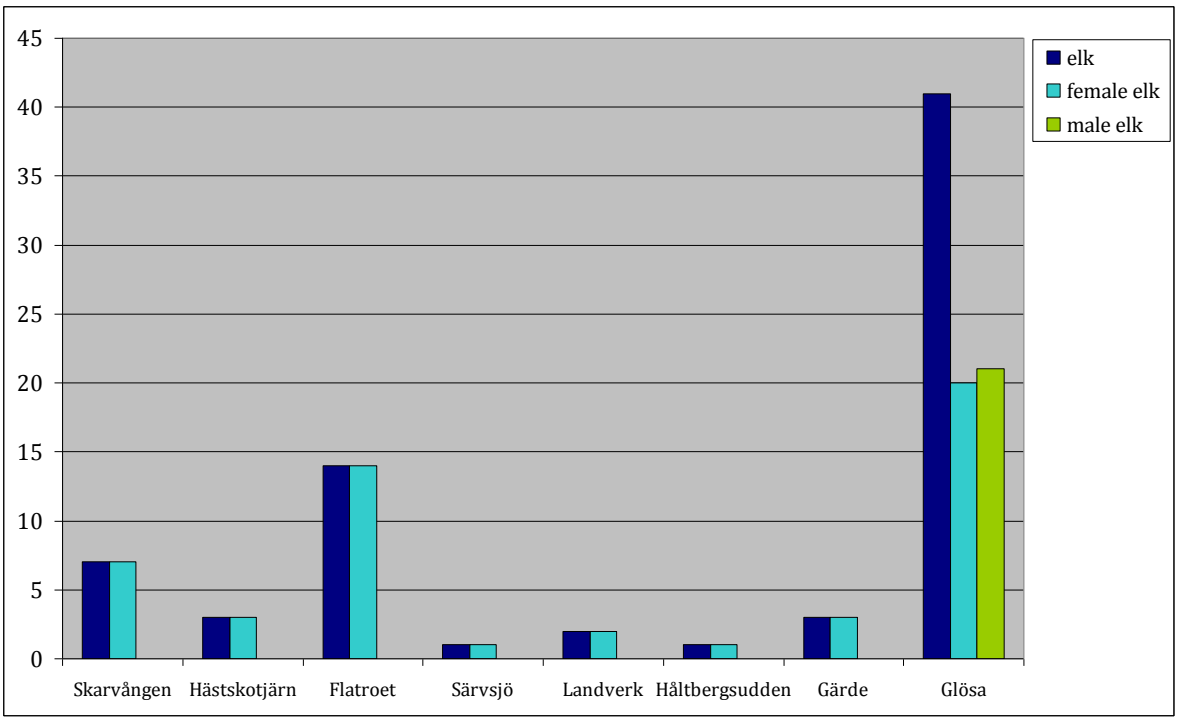


Figure 6.26 Male, female and total elks.

The basic categorisation of elk can be further subdivided into moving/stationary elks and small versus large elks. Here was an attempt to purposefully create a different set of meaningful characteristics, depending on whether the animal was moving or not. It can be seen in Table 6.1, that males are only found in Glösa. The majority of elks at Glösa are small with only 1 large male elk and 7 large female elks. At Glösa, the majority of elk, both male and female, are moving- whilst at the other sites, 18 stationary elk and 33 moving elk can be found. Elk seem to have a slight tendency to be represented as moving.

Site	Male Elk				Female Elk			
	Moving		***Stationary***		***Moving***		***Stationary***	
	small	*large*	*small*	*large*	*small*	*large*	*small*	*Large*
Skarvången					3		1	3
Hästskotjärn					1		2	
Flatroet					7		7	
Särvsjö								1
Landverk						2		
Håltbergsudden							1	
Gärde							2	1
Glösa	17		3	1	20			

Table 6.1 Elks all sites, male or female, moving and stationary, small or large.

The separation of humans into gendered and genderless, in Table 6.2, shows that sexual dualism of elks was also projected onto humans. Skarvången contains the most human motifs, with 6 males, 2 females and 2 non-gendered motifs. All other sites contain either identifiable males or females, and this is the only site where genderless motifs are found. As the carvers were capable of carving or drawing both male and female motifs, it can be assumed that their decision not to make the gender explicit was important. However, it must also be remembered that the depictions of gender are quite subtle and the effects of weathering at painted sites means that certain features may be missing, whilst other may have become more visible as the paint smudges.

Site	Other Animals			Human		
	bear	*smaller mammals*	*snake*	*male*	*female*	*unisex/ unknown*
Skarvången		3		6	2	2
Hästskotjärn		2	1	1		
Flatroet	1	2		3		
Särvsjö						
Landverk						
Håltbergsudden						
Gärde	2				1	
Glösa						

Table 6.2 Other animals are subdivided into bears, smaller mammals and snakes, whilst humans can be male, female or unisex/unknown.

The ambiguous nature of other animals and motifs, in Table 6.3, means that a detailed classification-based on modern scientific categories- is not possible. In essence, what carvers are showing is that they 'can' draw other motifs, and they are aware of other life forms. The degree of ambiguity that other animals have has the effect of emphasising the importance of elk motifs and, to a lesser extent, humanity. It is argued here, that other animal forms are providing a background- or framework- into which the importance of elks (as a main representation of ideology in the Northern Swedish Neolithic) is being projected. In the same way that a painter will not draw background features with the same clarity- in an attempt to emphasise the subject in the foreground- the marginal nature of other motifs in this region seems to function as a support act to the main elk representations. By drawing some ambiguous motif types, they are showing the relative importance of elk in comparison to other animals.

Site	**Sea/Water**			**indistinct/ unfinished animal type**	**lines**	**blotches**	**tracks**
	fish/ whale	*boat*	*coral*				
Skarvången	1	3	1		6	4	
Hästskotjärn				2	1	7	
Flatroet							
Särvsjö							
Landverk				1			
Håltbergsudden				6			
Gärde				1			14
Glösa					3	6	

Table 6.3 Sea/water subdivided into fish/whale, boat and coral motifs, tracks and other motifs.

Furthermore, in Table 6.3, it is noticeable that sea/water motifs are only found in Skarvången -where the largest concentrations of human motifs are found. The boat motifs show a similar representation, stylistically, to Nämsforsen. The stage of design at Skarvången is later, and less emphasis is placed on naturalistic representation, and more on ambiguity between different motif types. A decision was taken to classify such motifs as cultural (boats rather than birds), as this site also has the highest concentrations of humans. The whale motif, whilst uncommon to Sweden, is more common in the Norwegian Mesolithic/Neolithic-whilst the coral motif does seem to fit with the whale- extending the maritime theme at Skarvången. Again, the coral interpretation is given due to its location at the same site as the whale, but it could quite easily have been a smudge of paint. Finally, tracks are only found at one site, and together with an unfinished/undisguised animal.

6.3.6 Summary

Like the rock-art of other hunter-gatherer areas of Northern Scandinavia, elk dominates Jämtland. Other design classifications, whilst present, seem to have had little importance (at least in terms of number) for Neolithic peoples here. Other motifs that are not either elk, other animals or humanity, are really just side issues and are not that important. However, their small numerical value does not mean that they lack importance, and their significance, in terms of meaning and the creation of discourses, will be explored in the next chapter.

Female elk dominate, based on the lack of both chin tufts and antlers. When male elk are represented, they are mostly shown with both antler and chin tufts. 21 out of a total of 72 elk are male- 4 of which are stationary. Stationary is defined here as a representation where the legs are not bent, but straight. 18 female elk are also stationary, which is a higher number than male elk (4). By contrast, 33 female elk are moving, whilst 18 are stationary. Thus, moving female elk are the most important design group. If lines and blotches are discounted from the analysis, then humans and tracks are the second most important motif type. Interestingly (like

Cumbria), the more complex a site (complexity here is defined by the total number of motifs at the site), the fewer the numbers of design categories. Sites with lots of motifs tend to have only one, or maybe two motif types-whilst those with the least amounts of motifs have a lot more variety.

The environmental and archaeological evidence shows that the processes that led to the creation of rock-art began either side of the Scandinavian Peninsula. To the west, groups of elk and reindeer hunters hunted both animals, and collected slate between Norway and the quarries of Jämtland. To the south, in Sweden, Mesolithic and, later, Neolithic peoples began moving further north and east, along the Baltic. At some point during the Neolithic, these two groups- the Slate culture and, what eventually became the TRB- came into contact to exchange goods and objects. Flints from Southern Scandinavia, which were later reworked in the north, seem to have been exchanged for slate and, possibly furs, with TRB and PWC groups along the Baltic. It is suggested here, that the purpose of the art was a means of reinforcing the identity of the peoples of the Slate Culture, during a period of interaction with the southern groups. By the Neolithic period, there was the beginning of the establishment of exchange networks across Scandinavia. It can be argued that the rock-art provided a link between quarrying in Jämtland, and the exchange of slate.

The structure of the art, from this region, is based on a number of simple dichotomies of the main motif type- the elk. The statistical analysis will always be slanted towards the elk, given its near total dominance at rock-art sites in Jämtland. The division of elk into male and female, stationary and moving, gave this simple motif classification, and added depth and meaning. In the absence of boats, maleness and femaleness at the earlier rock-art sites in Jämtland, are expressed through sexual differentiation of the elks themselves. In comparison to the elk at the Nämsforsen site-, which may have expressed maleness in boat icons, the male characteristics of these elk are over exaggerated. Furthermore, in addition to maleness, most male elk are not

moving, whereas in contrast most female elk are moving. Whatever meanings this may have had to the Neolithic peoples, will never be known-but the basic structure of rock-art from Jämtland is; maleness: stationary, femaleness: movement. However, the nature of classification and quantitative analysis means that the more nuanced aspects of the art could not be investigated. Furthermore, a failure to analyse the other rock-art motifs in this region- because of their small number- means that a textual approach can overcome this limitation. The next chapter will begin to interpret these motifs and show how they were used to create discourses- in combination with the elk motifs. The relationship between the other two important motif types-humans and other animals- in Jämtland will be explored-with careful consideration given to stylistic changes, as they related to the evolution discourses, over time.

CHAPTER SEVEN

Textualising rock-art of Neolithic Jämtland

7.0 Introduction

In chapter five, the theoretical basis for undertaking a discourse analysis was outlined. The purpose of a discourse analysis is to identify the discourses that are inherent throughout all 'texts'. By treating rock-art as a textual metaphor, the discourse themes, upon which the art was built, can be identified. Part one of this chapter will quickly recap some of the main ideas of discourse analysis, its application (in this prehistoric setting) and its specific role in relation to social theory- as an intermediary between structure and agency. The second part will deal with the rock-art sites that have been chosen for analysis. Five rock-art sites were chosen and then textualised (with the main discourses being located). Finally, part three will draw together the main discourses of Northern Swedish rock-art, in order to discuss some of the wider implications of rock-art (and its implication in directing *agency* which will be explored in chapter 8).

7.1 Discourse analysis and its relationship to Neolithic rock-art

The application of a discourse analysis to Neolithic rock-art, borrowed and adapted from social psychology, is a process of textualisation rather than the more common visualisation of the art. Although rock-art may not be a text - in the specific and modern sense of the word - it can be converted into one, in order that social theory is explored. The first part of the methodology used, was to quantify the art and show; (1), what the main motifs were and (2), that there existed a relationship between them, which structured social relations.

This chapter represents the next stage of this process, as the art is textualised in order that certain themes or discourses can be identified in the text. Discourse has a specific meaning depending on context; in a modern context it means certain words, or groups of words that are

used over and over again, by users, to reinforce socially constructed ideas and concepts of themselves. For example, in the modern world, *marginalised* is a discourse, *gender* is a discourse, *entitlement* is a discourse and *class* is a discourse. It is through discourse that *identities* are created, but, in prehistory, the only discourses that can be accessed are visual and material cultural ones. For the people who made the rock-art in Northern Sweden, elk were a discourse theme as was humanity, small mammals and boats.

In one sense, discourse has the opposite meaning to aesthetics; it is a desire to move away from aesthetics that has led to the textualisation of the rock-art that seeks to downplay the visual- whilst emphasising that rock-art can (and does) have a textual quality, as well. Gell (1998) rejects the aesthetic notions of art that have influenced how rock-art is understood. Moreover, there is a need to view art as having a direct and purposeful effect on the viewer -beyond the banal and 'aestheticising' effect of the contemplating of art. For Gell, art that is modern, prehistoric or anthropological can be viewed as a part of, and a catalyst for, wider social action. Discourse is specifically interested in locating identities and discourse themes, which are part of a wider social whole. A discourse analysis will, hopefully, move understanding away from the aesthetic and towards a structural/discourse/agency model of prehistoric art, and its impact on social relations.

7.2 Identifying discourses

The decision to select some sites but reject others is important. Rock-art that was too complex, confusing or damaged was left out (see Figure 7.2). Potentially, a lot could be learned from such sites, since their often random and confused nature was a powerful expression in its own right. But, for the purposes of locating meaning and structure within the art, they are not suitable- and only those sites that could be textualised were chosen. The second step was to textualise the sites in figure 7.1, translating the geographical setting and the visual narratives

into a textual account. The third and final stage was to explore the interactions and combinations of motifs.

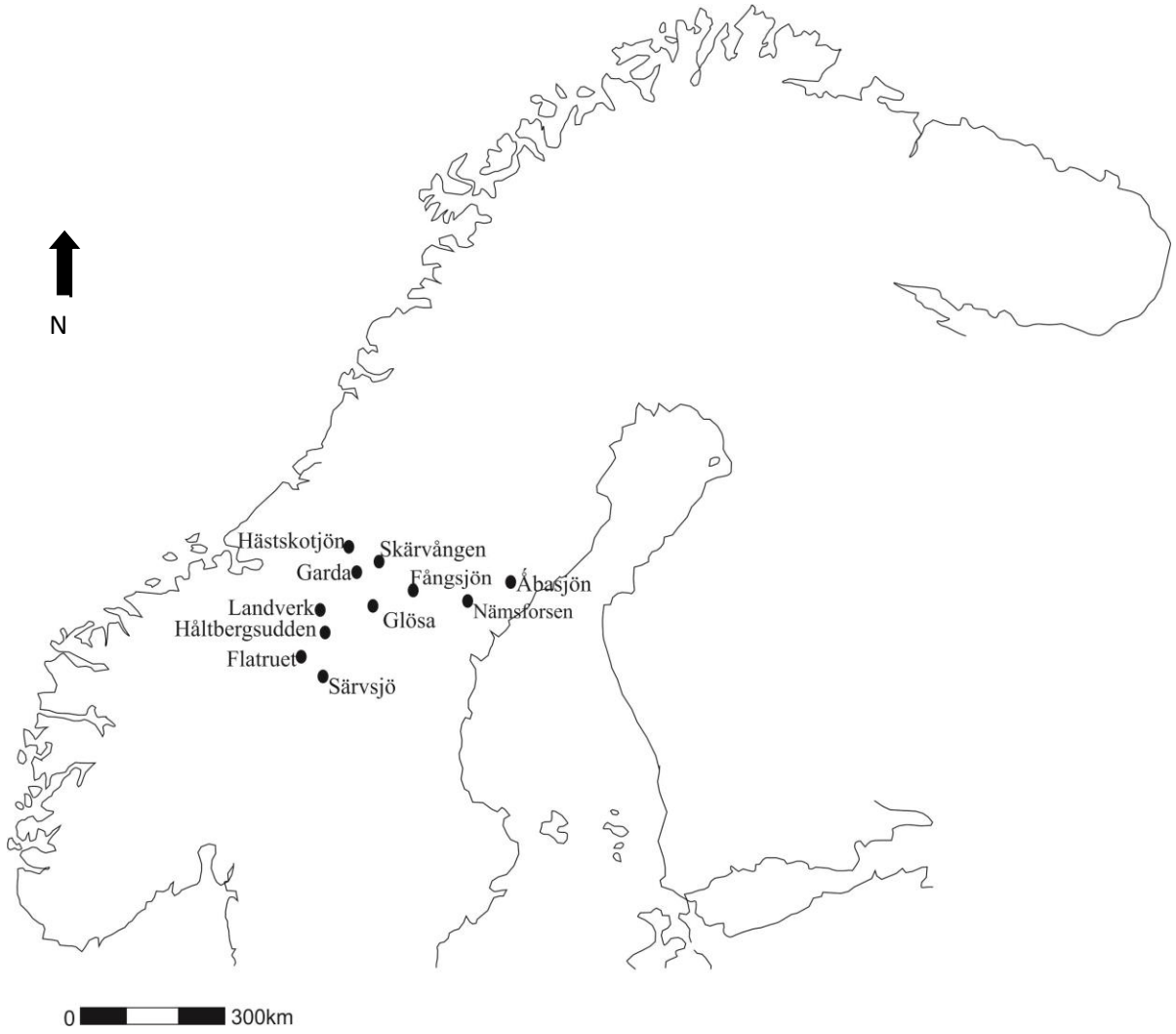


Figure 7.1 Map of Scandinavia along with the sites mentioned in this chapter.

Normally in a structuralist analysis, a table of all the possible combinations of the motif types would be made, and then the actual design combinations, that are found, are included in this table. Normally a limited and selected number of motif combinations are found. Here, however, it was decided to look at the interactions and combination more broadly- and produce a textual, rather than a graphic, account. It was felt, that talking about the combinations in a more general

way allowed a more complex and analytical discussion of the rock-art, and the combination of motifs. Since the nature of a discourse is embedded within text, to create such a table- of all possible combinations, Levi-Strauss (1966) moved the rock-art more towards a disembodied structuralist account, as opposed to a more favoured, textual, post-structuralist analysis. The key point was to maintain the focus on the rock-art as a textual description and presentation, as opposed to more ideological and theoretical dimensions of binary opposition and cultural combinations.

Figure 7.2 Four examples of rock-art sites that could not be analysed using discourse analysis, from the top left moving clockwise they are; Hästskotjärn D, Flatruet B, Håltbergsudden B2 and Hästskotjön C1.

7.2.1 Rock paintings at Skärvången, Jämtland

The rock carvings at Skärvången in figure 7.3 lie on one of the southern lakes that feed into the River Hårkan. The lake itself is about 9km in length and 361m above sea level, and bends to a right angle towards the small village of Söder Skärvången. From the northern end of the lake, the Norwegian border is only 26 km to the northwest. To the west, the land surface is hilly with mountains rising to about 700m. To the east, the landscape is more rolling and gentle (not unlike the Eden Valley in Cumbria). The rock-art itself is found in two locations on the lake's eastern shore. The southern carvings are located at Brattberet, and can be found 1.5 km away from the lake's outlet (the second rock-art site is further north at Hällberget and will be discussed when dealing with the site Skärvången B:2*).*

Figure 7.3 Rock-site from Norra Skärvången.(Retrieved from http://www.panoramio.com/photo/8856114) [Accessed on 30th March 2014].

7.2.2 Skärvången A

The rock painting at Brattberet is painted on vertical rock that is perpendicular to the water's edge. The site is only accessible by boat or over the winter ice (Figure 7.3). The action of the frost and ice-along with a tendency of this type of rock to split- means that the site is heavily damaged and that some of the original paintings have probably been lost. The carving surface is covered by an overhang, protecting the paintings, which protrudes 1.5m. The width is 6m and the height 5m, the art in figure 7.4 is located between 1m-2m above the water's edge (Hallström 1960, 21).

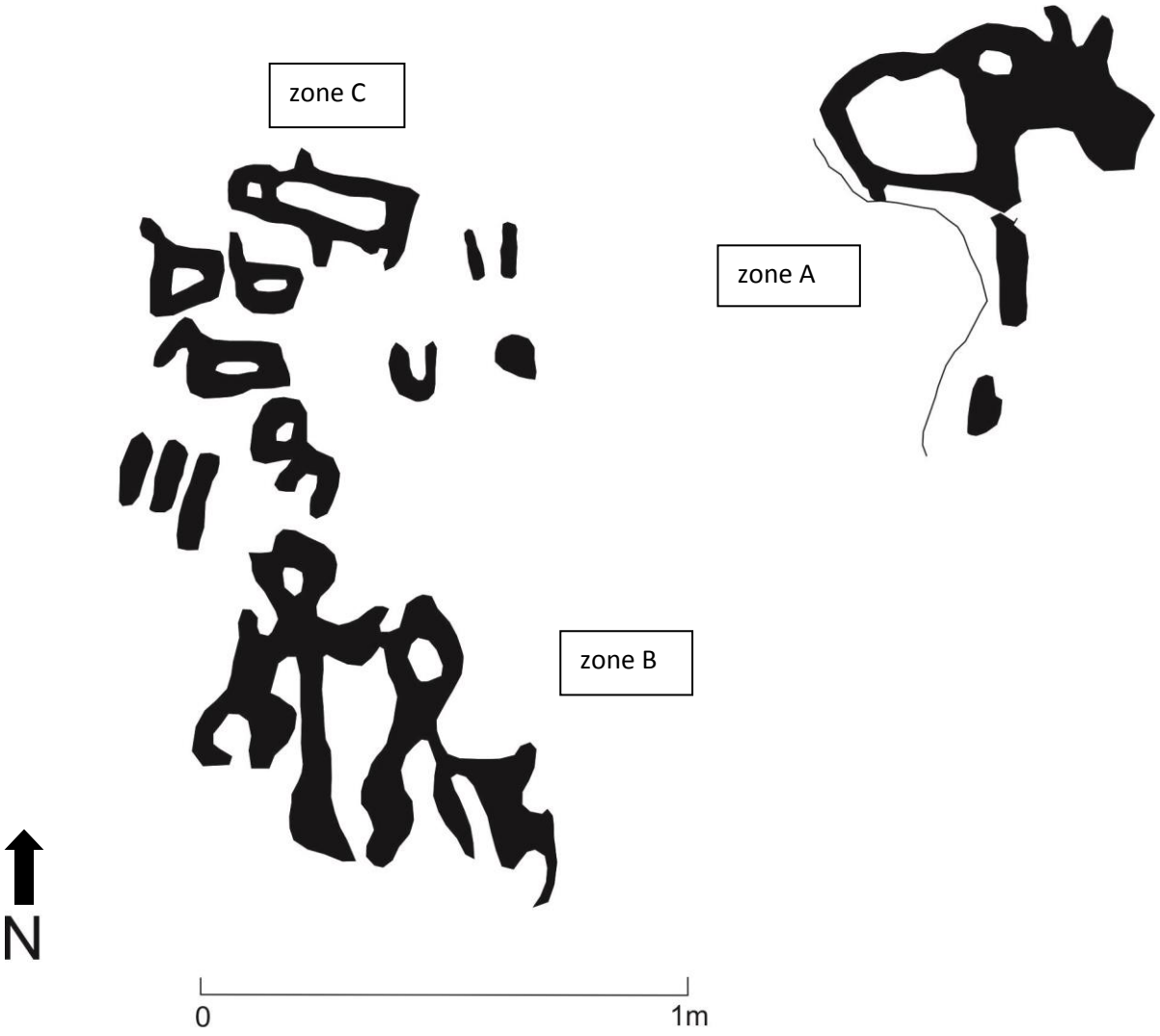


Figure 7.4 Rock-painting at Skärvången A.

In Figure 7.4, three main clusters of motifs can be seen. The first- zone A- contains an elk, the second- zone B- has human figures and zone C contains animals. The first thing to note is that the profiles of the design elements all face different directions. The elk in zone A is facing away from the other animals (further emphasised by the fact that the elk and the other animals are directly opposite one another). The elk, stylistically here, is clearly an elk and there is a high degree of naturalism in this painting- although not to the same extent as earlier Mesolithic representations from Norway (Lødøn & Mandt 2010, 12-14). On the opposite side, zone C (a rather different situation, *vis a vis* the human and other animal forms) can be found. Looking at the humans in zone B, one is much clearer than the other. The one on the left has arms and a head, whilst the other seems to only be a torso and legs (although possible damage and erosion to these motifs needs to be factored in).

Directly above the human figures- in between zone B and C- is an interesting motif that seems to 'link' the humans to the animal figures above. To the right of three lines/blotches, is an ambiguous figure that seems to be a creature intermediary between a human and animal. It is bending over, as if crawling away from the human, towards the animals. Above this motif, three animal figures (that could either be boats or birds) are found. The lack of differentiation between the two is an important statement on the part of the painters (rather than any lack of skill on their part). The stylistic accuracy of the elk at this, and other sites show this. Finally, figure 7.5 shows zone C which is topped with, what seems to be, a four legged land animal- probably a pig or boar. The generally ambiguous representations make classification difficult.

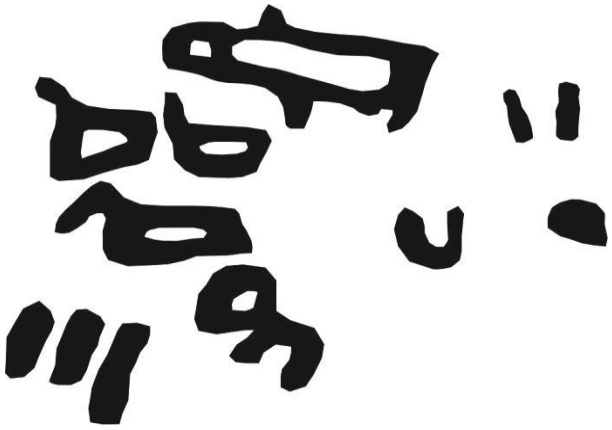


Figure 7.5 Zone C, human/animal motif, three boat/birds and one pig/boar.

In zone B, the human figures are relatively the same size as the elks- but share little of the same concern for accuracy; this, it is suggested, forms part of their meaning. Unlike the elk and the other animals that face opposite directions (side on to the viewer), the human figures face forward, as if looking at the viewer. Thus, the painter has created the effect of drawing the viewer's attention towards humanity. Naturally, drawing animals face on is not as easy as with human figures, and this point needs to be kept in mind when viewing the next motif- the human/animal figure above, which is no longer facing in profile.

Immediately above the two human figures- in zone C- there is, what appears to be, a very simplistic representation of a human. However, unlike the other human figures, it shares features that are both animal and human. The circular head shape is bending over and, what appears to be, arms and legs are 'curved' over- as if a human is shown on all fours. The significance of this may have been overlooked, were it not for the fact that the animal/human figure is between the human and animal zones, on the left side of the carving. This motif seems to show human figures and the possible ideological conceptualisation of 'humanity' as metamorphosing into animal forms; perhaps, in this case, the three lines next to it may have added or reinforced a meaning that was lost to us.

The animal zone, to the top left hand side, shows three birds or boats. The issue of whether these motifs should be classified as birds or boats was discussed in relation to the site at Nämsforsen (Hallström 1960; Tilley 1991). Birds and boat motifs share common features in their representation in Swedish rock-art- even into the Bronze Age in Southern Sweden. Goldhahn and Ling suggest that the origins of the boat motifs, in Southern Sweden and Denmark, lies with the hunter-gatherer Mesolithic and Neolithic period rock-art (Goldhahn & Ling 2013, 270). It is suggested, here, that perhaps the origins of the boat motifs began, also, as the representation of birds, which slowly morphed into boats. The fact that such motifs are ambiguous (originally highlighted by Tilley 1991) shows that- unlike the naturalistic elk, or, to a lesser extent, the human figures- there was a reason why boats and birds seem to share certain stylisation. The bird/boat figures are facing in the opposite direction from the elk, which is significant, as the painter/s may have used them to invert meaning, or to reinforce that the two designs are opposing classes of motifs. The elk seems to be going in one direction and the animals seem to be moving in another. This division is further emphasised by the way- and medium- in which such animals move. The elk is a land animal and, although they can swim if necessary, they live mostly in the forest, and only enter the water when they have to. The other birds move through air and on water, but are often clumsy and uneasy when moving on earth- in contrast to their smooth flight or swimming.

The fact that birds can move and live in both water and air is important as boats, or at least people from the coast, would have been exchanging goods with the peoples living inland, in Jämtland. Drawing on Tilley (1991, 126-148), the movement of boats was metaphorically connected to birds, as Siberian shamans, and local Jämtland Sami shamans, still used totems of boats (that also fly) as part of a ritual vision quest. Thus, boats and birds both ‘inhabit’ the water and the sky-literally and symbolically.

Another interesting issue is how the motifs relate to movement and direction shown in figure 7.6. The elk is facing east and could be argued to be moving from the west to the east, across the land. On the other hand, the small mammals are facing west. The human figures are facing forward, which shows that they are not moving in either direction. The humanistic discourse, and its simplistic style, falls somewhere in the middle, between west and east, and, as such, was possibly a metaphor for Jämtland, its people and their way of life- lying halfway between the two (the elk and the bird/boat motifs). This seems to be an attempt to show these motif classes as having opposite meanings- or, at least, they oppose each other in terms of their meaning in the Neolithic. The artist/s could have, quite easily, just drawn elk or birds or boats; the fact that they drew both together- and facing opposite directions- was significant.

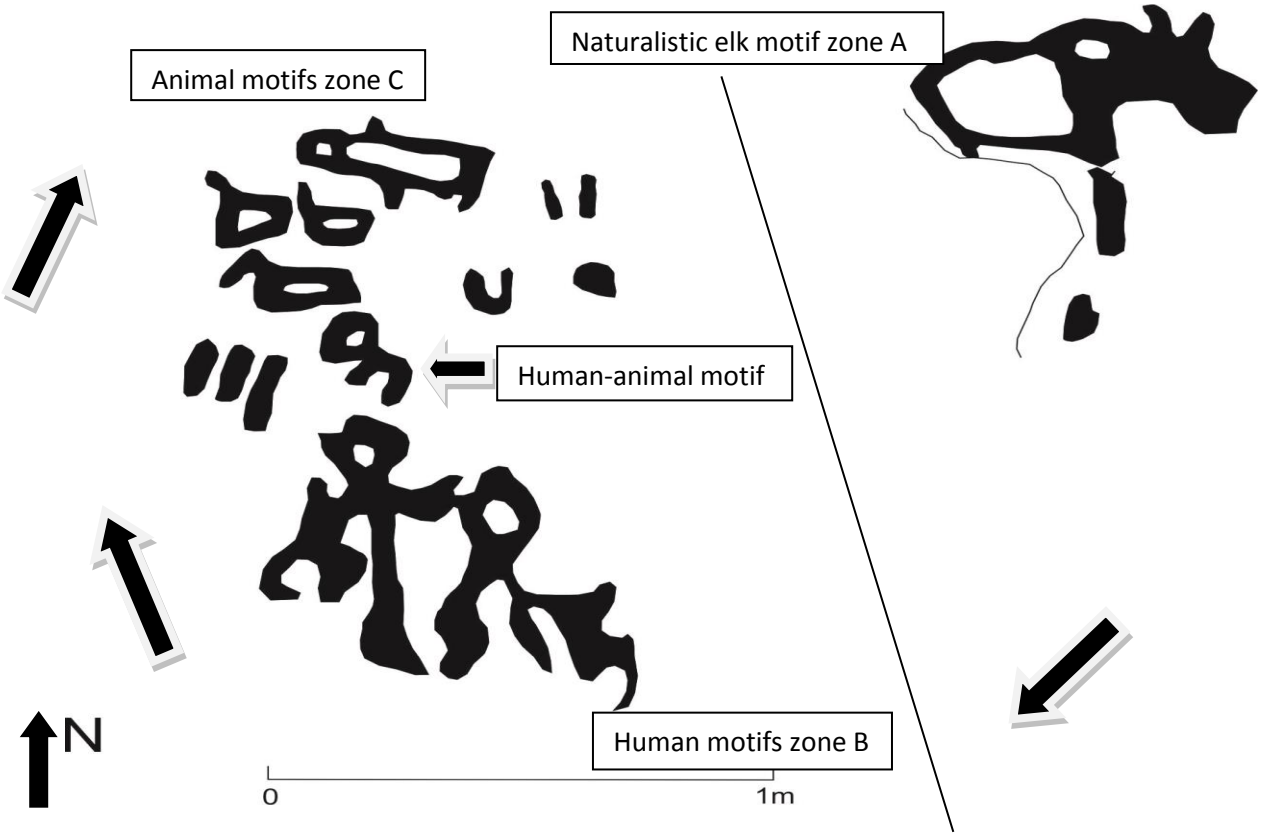


Figure 7.6 Progression of design elements across time.

7.2.3 Skärvången B:2

Moving to the north and west, along the lake, is the second site at Hällberget. Like the previous site, the carvings are found perpendicularly to the water- along a 60m long precipice, with a flat plateau above. The rock painting sites are vertical and 1.2 m above the water's edge. The site of Skärvången B:2 in figure 7.7 is sheltered from the left, and from above, by a 15 cm broad and 1.5m long ledge (Hallström 1960, 26). The most complex rock-painting panel, at Skärvången, was divided, accordingly, into elk, humans and other animal zones (Figure 7.9). It is suggested that this scene develops from the top right hand corner, with the animal facing inwards towards the scene. There is a possibility that it may begin lower down with the elk, which are facing away from the scene. However, the elk are moving eastwards, which suggests (like Skärvången A) that the elk are moving from the west to the east or, as time moves (conceptually in the minds of the painters) from the past (west) into the future (east).

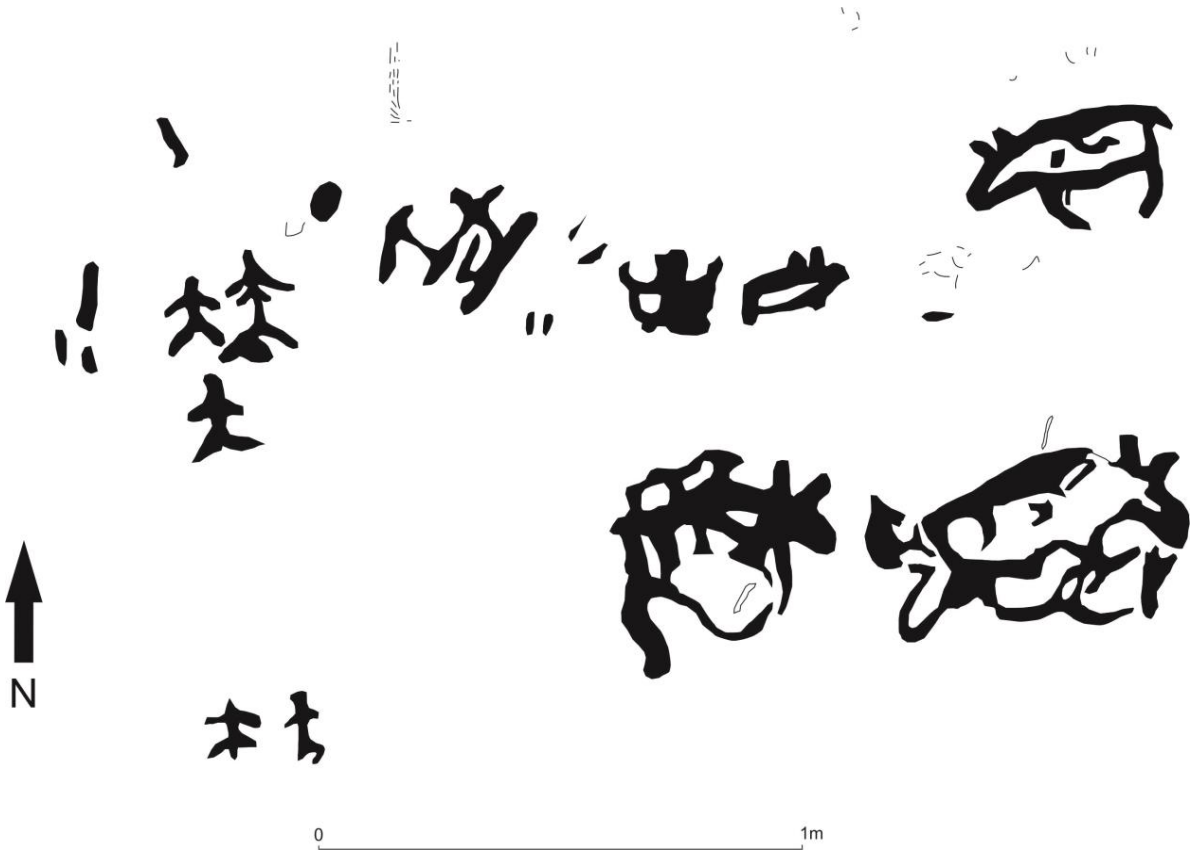


Figure 7.7 Skärvången B:2.

The animal in the top right hand corner of the 'other animal' zone resembles a 'bear' motif that is also found at Gärde. Whilst this may be argued to be an elk, it seems to lack the definitive characteristics of the two animals found below it (which can certainly be identified as elk). Again, the ambiguity of this motif should perhaps be seen as purposeful and part of its meaning, rather than the result of a lack of skill in naturalistic representation (a skill clearly demonstrated elsewhere on the panel). Furthermore, the fact that this animal is facing in the opposite direction from the elks below-and is set apart from them-suggests that this design element is meant to be seen differently.

The next in the series is an interesting pair of motifs that, perhaps, suggest a link to hunting animals that are not elk. On the right, what appears to be a four-legged mammal (beyond any further classification). It is much smaller than the elk or 'bear', which suggests that there is an attempt to differentiate this motif from the others, through its size. Next to it is a figure that, Hallström suggests, may be an archer (see Figure 7.8). It seems to have a human form and is a more complex representation than the more usual stick human motifs, to the left of it. Its arms seem to be raised and there appears to be a bow on the left. This suggests that it could be a hunting scene, and would fit within the early hunter magic interpretation of the art. Another interpretation may be that it is a 'shaman' performing a ritual. Either way, the motif is too obscure to say much, and all that can be ascertained, with any certainty, is that this motif is certainly different from the other human motifs, and the animal motifs. Furthermore, the figure occupies, what could be argued to be, a 'symbolic' centre of the panel, with motifs circling, or moving around, the periphery (Figure 7.9).

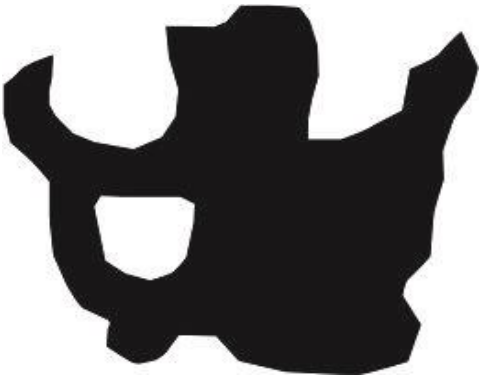


Figure 7.8 'Archer' motif at Skärvången B:2.

Between the 'archer' and the groups of human representations, there is an interesting decorative figure, which is now unclear, but may have originally been a figurative design. Although its meaning or current design form are not known, it does provide a dividing element between the right and left hand sides of the panel in Figure 7.9. The abstract design does contain the same design elements as the human figures, and may be two human figures that have been drawn together and connected- this may have had symbolic significance. That said, what is certain is that the left zone is occupied by humanity. The figures are simply drawn, stick motifs-although they are clearly humans. This serves to highlight the 'special' nature of the 'archer' or 'shaman' figure, to the right. Interestingly, humanity, here, is sexed quite clearly, as the group of three motifs, on the upper left, has one definite female (shown by breasts) and two possible males-although they lack the defining characteristics. Below, on the bottom left, are two stick human figures; one is clearly male (as it has what looks like genitals between the two legs) and the other is slightly ambiguous and could be either sex.

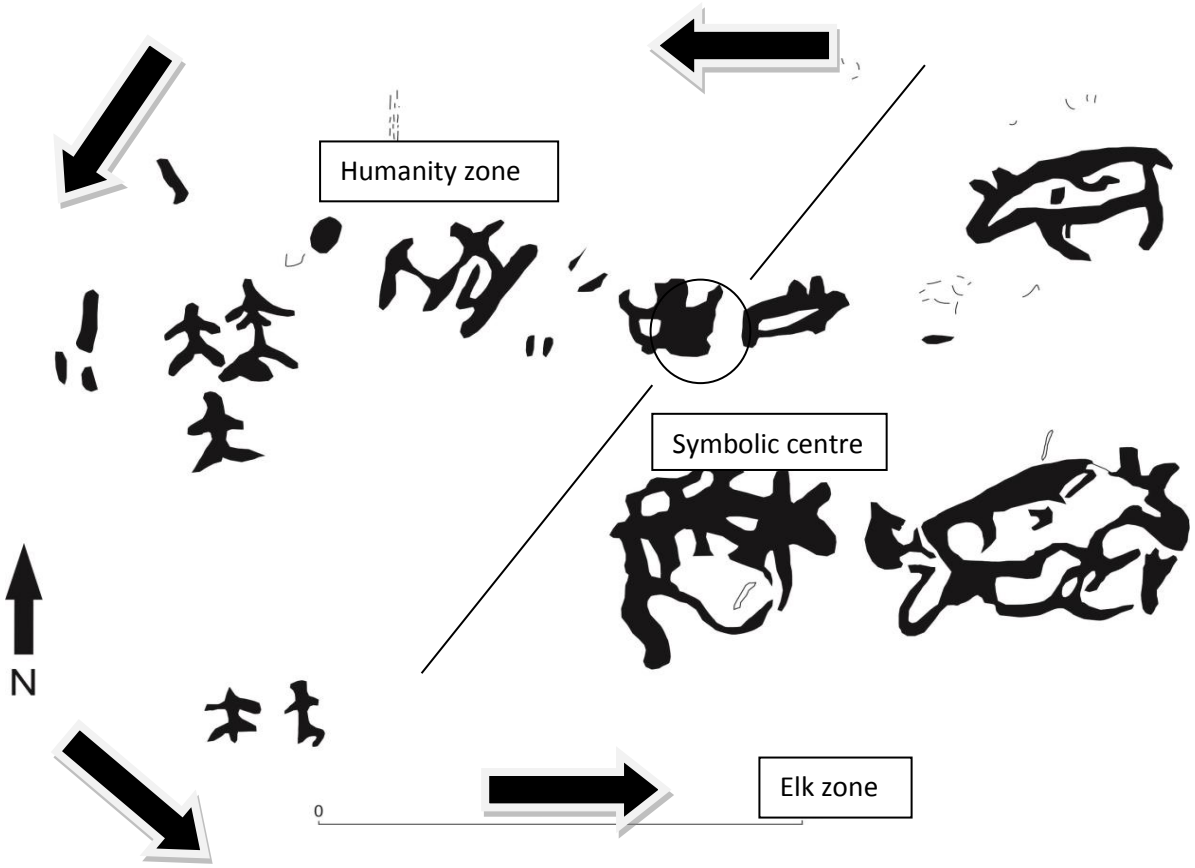


Figure 7.9 Humanity zone and elk zone surrounding symbolic centre at Skärvången B:2.

Moving back across the 'threshold', to the right of the symbolic centre in the elk zone, are the largest figures that are also the best representations, in terms of their naturalistic style. Both elks are moving away from the human figures, and the movement of the animals was further emphasised by the painter/s' use of adding a context,-as if it is moving through the forest and across land. This is clearest on the bottom right hand elk. This links, here, with the ideas developed from the other scene at Skärvången A, where the elk represents land, as opposed to boat and bird, which represent water and air respectively. Here, the elk are clearly being shown moving across land. The use of internal lines and shading adds depth and texture to these motifs that are lacking in the human and other designs. Humanity may be seen as two dimensional, flat and lifeless, but the elk moves across the panel as if moving away from humanity and all that it may, metaphorically, represent.

Thus, having textualised the visual statements (creating a transcript of the two rock paintings from Skärvången) it is now necessary to identify the main discourses that construct the narrative. There are three discourses created, and acted out, upon the rocks; humanity, elks and small animals. Firstly, the elk discourses zone is set apart from all other motifs, and they cannot be in close proximity to other design elements. Often this division is emphasised by the elks facing in the opposite direction, but, more importantly, in the way the elks are drawn with a higher (relative) degree of naturalism and realism, in relation to the other motifs. In Bronze Age Southern Scandinavia, the representation of human figures- along with boats-had become more important as, perhaps, the natural world fades in significance.

Finally, animals other than elks are shown in an ambiguous way. The difficulty in identifying species of other animals is in direct contrast to the naturalistic representations of elks, and the simplistic, but clear representation of humanity. Other animal species seem to have been viewed as 'other' or 'otherness', occupying a kind of ambiguous status within the cognitive scheme used by Neolithic communities. The bear is a good example of one such ambiguous animal, since bears are different to other animals in that they have both human characteristics (walking on two hind legs) but are still different to humans. Thus, everything that is not an elk or a human is seen as occupying an ambiguous zone. Therefore,, the three discourse themes have been given added depth by connecting them to styles of drawing: 1) elks and naturalistic discourse, 2) humanity and simplistic discourse, and 3) other animals and ambiguous discourse. The rock-art panels create a narrative based on these three concepts, as the representation of themes create a discourse between the three types of motifs and the ideas that they represent; naturalism, simplicity and ambiguity.

7.2.4 Gärde A:3, Jämtland

The rock carvings at Gärde, Offendal parish, Jämtland, lie within a region that is relatively low lying, but still slightly hilly. To the north and west of the lake, the landscape is wild- remote

upland known for its elk and bear hunting (Hallström 1960, 34). The carving lies at the eastern end of Gärdesjö (Gärde Lake) along the river that flows out of the lake, just south of the village. The rock is slate and heavily striated in figure 7.10 through the action of glaciation and weathering. The rock-art site of Gärde A:3 is located on the southern source of the river. The carvings are very low in relation to the water -0.25-0.5m above the normal water level (Hallström 1960, 36)

Figure 7.10 Elk and foot prints from Garda A:3 (Retrieved from http://www.shfa.se/Bild/VisaBild.aspx?id=510&Bildtyp=v&maxWidth=550) [Accessed 31st March 2014].

The largest rock-carving panel at Gärde is unusual, in that it has tracks and foot marks that are more often associated with Bronze Age and southern rock-art styles. In the upper section, a dual discourse theme was created. The human tracks in figure 7.11 start from a stationary position, continue towards the elk, and then- upon reaching the elk- stop again. This is shown by the fact that the artist has placed both feet together to show that movement has stopped. The

elk is facing away from the tracks at a 90-degree angle, and its legs are drawn straight down in lines- showing that it is stationary. Here is found the first contrast and inversion between movement and stillness- human and elk. An obvious explanation for this scene is a hunting episode where the hunter is shown, through his tracks, as hunting the animal and then, finally, resting when the animal is close enough for the kill.

Figure 7.11 Tracks, possible ambiguous female figure and elk at Gärde A:3.

The lower zone is made up of four elk tracks, which, unlike the human tracks above, are shown to be stationary. To the bottom right there is the unusual figure of a human (figure 7.12), whose sex is ambiguous (although Hallström has suggested that it may be a woman in women's clothes). Other human figures clearly have breasts, in the Northern Sweden repertoire, so it cannot really be said for certain that this is female. However, whilst this may have been a problem for modern people recording and classifying the art, the ambiguous nature of the

figure's sexuality serves to reinforce the simplistic and stylized discourses surrounding humanity and gender in Neolithic society. Perhaps the carver saw gender as something not to be overly concerned with.

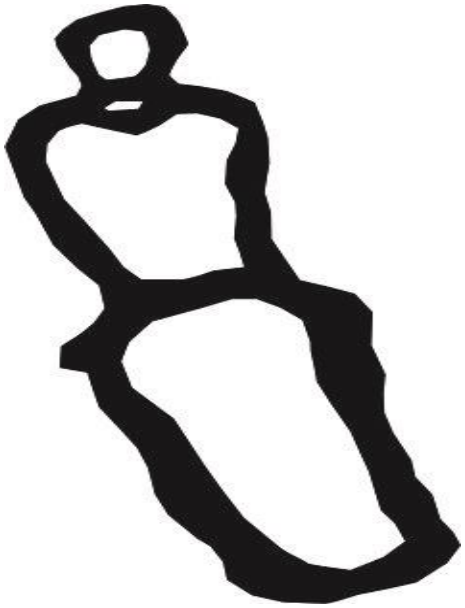


Figure 7.12 Possible female 'clothed' figure at Gärde A:3.

Beyond the literal hunting narrative explanation, a series of contradictions and inversions is taking place within the narrative shown in figure 7.13. The upper section of the rock-art carving is emphasising the 'movement' of humanity towards the stationary object of the elk. Here 'humanity', which is stationary, then shows movement before becoming stationary again- when it reaches the goal of the elk. Yet, turning the elk at a 90-degree angle shows a degree of indifference on behalf of the elk. It is certainly humanity that is moving towards the elk, and not the other way round. Again, the scene could be explained through hunting alone, but this would be to ignore the art's profound statements about Neolithic life, albeit produced in a very simplistic way.

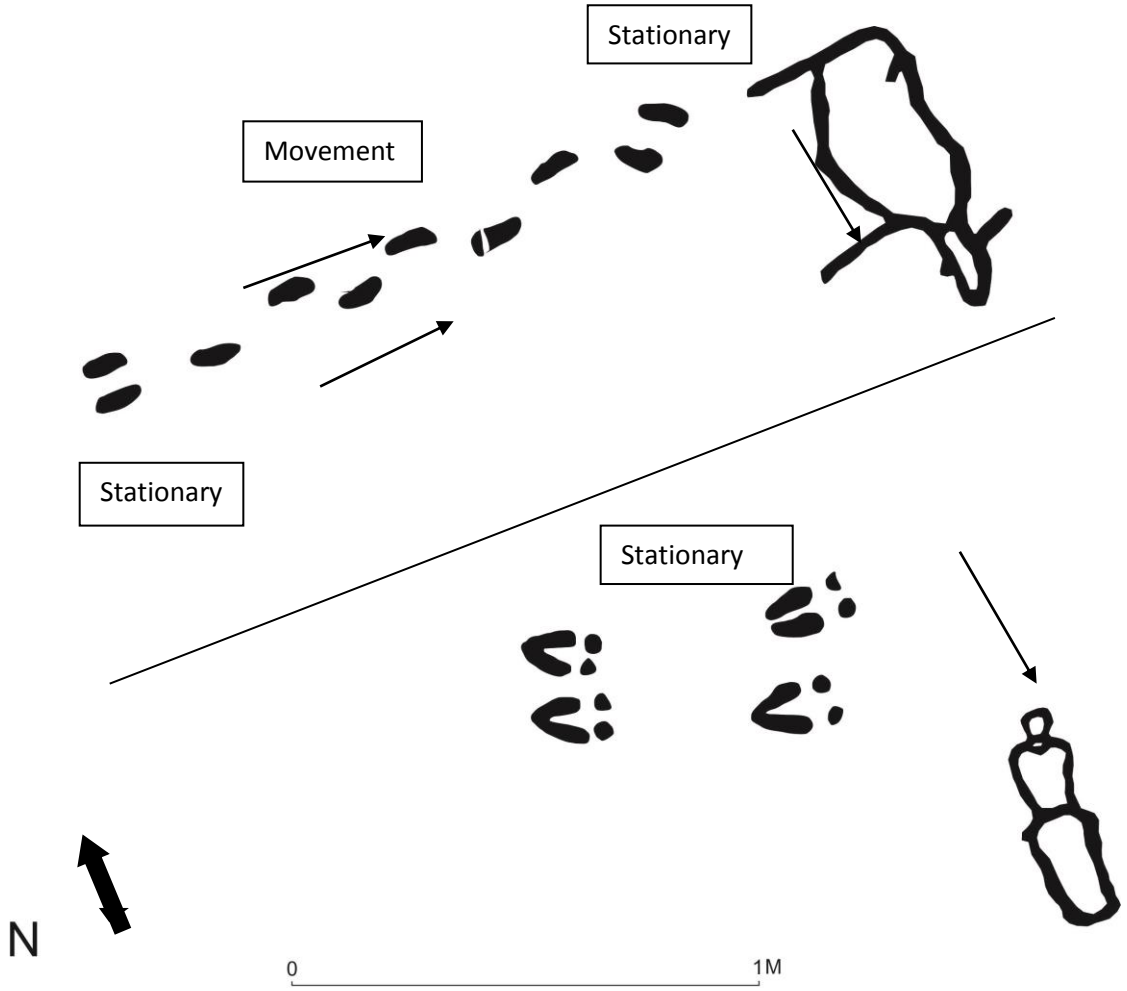


Figure 7.13 Movement and stasis Gärde A:3

The lower section seems to be a continuation of the upper, but here the tracks seem to be stationary-unlike in the upper section, where they are moving. Furthermore, the tracks are elk. At the same site, panel A:1 also shows one stationary elk and one single track, which again emphasise the non-movement of elks in relation to humanity. Elk can, and are, often represented as moving, but what is significant here is the representation as stationary- and its contrast with the movement of humanity (or at least its foot prints). It may be suggested that the carving of stationary elk tracks serves to highlight the fact that the human tracks are moving. Finally, there is an interesting conclusion to this narrative, where both tracks end and the figures are carved at a 90 degree angle to them. Humanity is shown, like the elk, to be static and lifeless. Other human figures, that are more simplistically drawn, are often shown with arms

and legs open- which gives the impression of openness and movement; however, this figure is shown without arms or legs and is simply constructed using three progressively smaller, rounded rectangles.

Another issue is the direction of the movement of the tracks. The tracks are moving towards the east. Both the human and elk are facing in this direction. However, the elk itself is facing along a north-south axis, along with the human figure. Therefore, being stationary, in this case, is expressed in a north-south axis of the motifs- but movement and tracks (although the elk tracks are stationary) are moving towards the east. This is the same at other sites in Jämtland, where elk are often moving towards the east.

7.2.5 Flatruet, Härjedalen

Moving outside Jämtland, into the neighbouring province of Härjedalen- close to the Norwegian border 43 km to the west- this region is a mountainous and remote frontier between Norway and Sweden. The paintings at Flatruet are situated at a height of around 860m (Hallström 1960, 92), and are on a vertical ledge that was formed by strata of grey to grey/white schist (Figure 7.14). The painted ledge, in figure 7.14 is about 5m high and runs for a total of 100m (1960, 92). To give an idea of size and perspective, the paintings are around an average of 15cm in length, with the largest elk figure being 28cm (1960, 97).

Figure 7.14 Main painting at Flatruet. (Retrieved from http://www.vbm.se/assets/files/pressbild/2014/RockArt_bookxibition/Flatruet2_300.jpg [Accessed on 1st April 2014].

The rock paintings at Flatruet have three main design elements present, like the Skarvången sites: humanity, elks and other small animals. Firstly, there was no attempt to sex the human figures. Again, rather than seeing this ambiguity as problematic, it should accepted that, for the painter/s, this was not an important issue.

To the upper right of the central human figure, two more human figures (Figure 7.15) are drawn in a similar style. However, unlike the central figure, which appears to have hands and arms, these figures are armless. This seems to only emphasise the central figure whose arms are wide open. Furthermore, there is also a centrality/periphery relationship between these design elements. The central human motif with arms is larger than the singular motifs that are contrasted with the peripheral, armless and smaller, dual motifs at the edge of the painting area.

Figure 7.15 Centrality of humanity at Flatruet.

The rock paintings at Flatruet have three main design elements present, like the Skarvångensites: humanity, elks and other small animals. Firstly, there was no attempt to sex the human figures. Again, rather than seeing this ambiguity as problematic, it should accepted that, for the painter/s, this was not an important issue.

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The second main design element is that of elks. Two different elk designs can be seen to coexist on the same surface-, which, presumably, had two meanings- or were painted during two different time periods. The elks can be divided into running elks and stationary elks; the running elks are all facing to the right, whilst 4 of the stationary elks are looking to the left. This issue is discussed at length by Sjöstrand (2010) and will also be discussed in the final part of this chapter. All of the moving elks seem to be moving away from the block of stationary elks, to the left of the painting surface. The moving elks, in figure 7.16 seem to be moving towards the right of the painting, whilst the stationary elks sit within one area. The use of space also emphasises the difference between the two; the moving elks have been drawn with more space around them, whilst the stationary elk are tightly packed together. Also, the stationary elks are drawn using thicker lines, and the paint was applied heavily, which serves to emphasise the heavy, static nature. The moving elk, in contrast, are drawn with finer, lighter lines.

A final issue is that the elk seem to be running to the east, whilst (although some stationary elk are also facing east) more are facing westwards. As discussed above, this seems to fit with the general discourse surrounding directionality of the movement of elk, in Northern Swedish rock-art. Human representations, once again, are facing forwards and have no directionality. This, perhaps, shows that, phenomenologically, humanity is *being*, whereas the elk and other animals show various aspects of *becoming*.

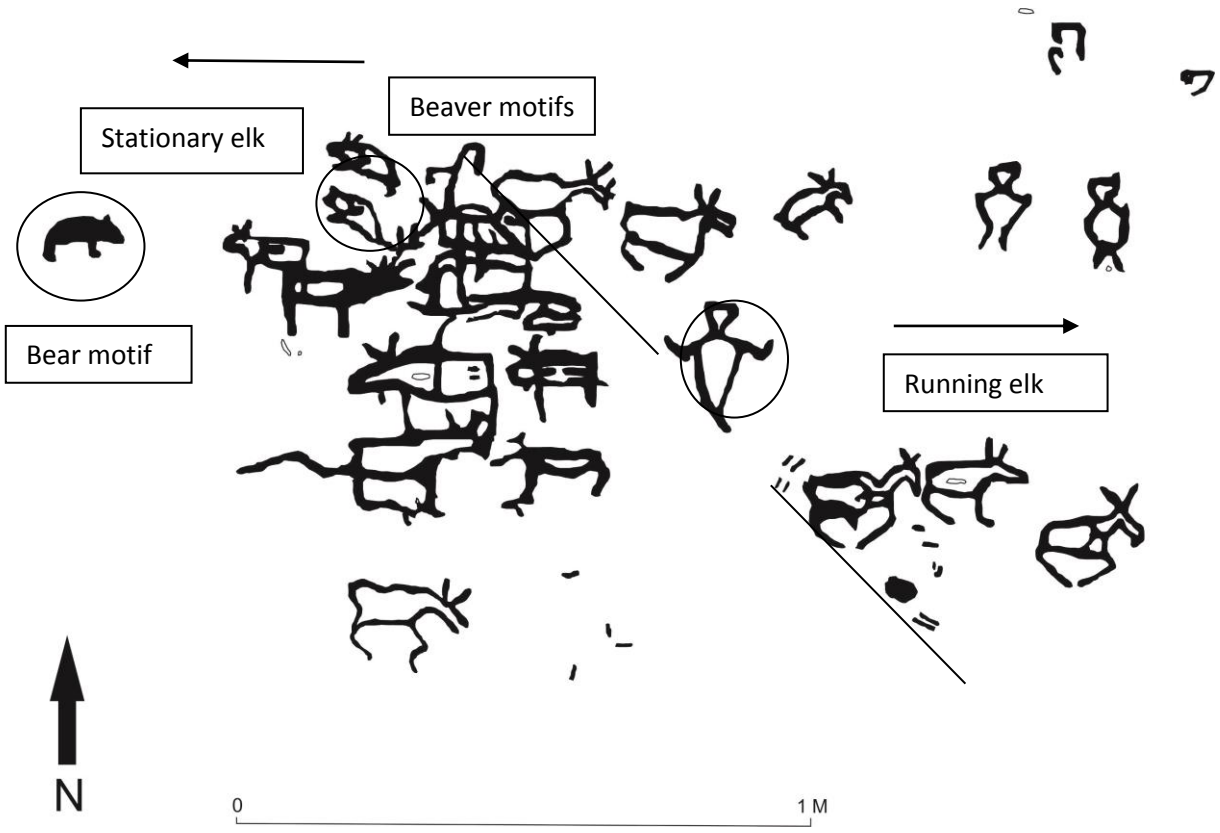

Figure 7.16 Centralised humanity and direction of stationary and moving elk.

Finally, the other indeterminate animals have been organised into two differing motif types. Other mammals are unlike the elks or humans in that they have been drawn without a clear view to identify a specific animal's species- again like the rock paintings and carvings at other sites. 'Other animals' seem to be conceived as a general, all encompassing unit-as opposed to elks, which are clearly defined as such. The animals on the top left hand side of the main stationary in elk zone in figure 7.17 seem to be beavers, and on the far left, the animal may be identified as a bear.

Firstly, the 'beaver' figures are closest to the stationary elks, and have been drawn using an outline only. Whereas the elks are facing and moving left or right, and humanity is facing forward, the beavers are moving upward and away from the main stationary elk zone. The second animal, the bear-unlike other animals- is coloured in completely.

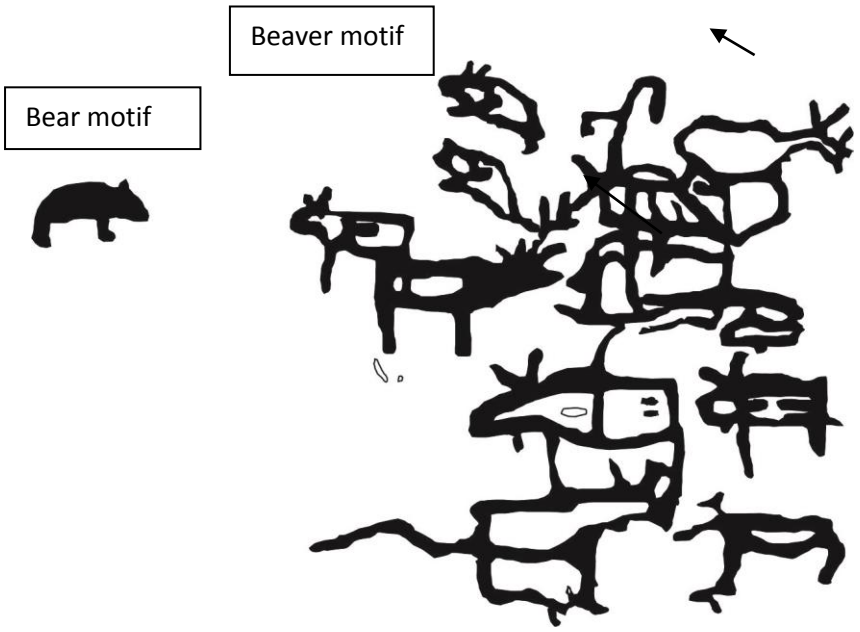

Figure 7.17 Movement of the beaver motifs and the bear facing the narrative.

The human figure in the centre is, possibly, the symbolic- as well as literal- 'centre', from which this painting site can be divided. Here, centrality may represent atemporality, which seems to be the case at other sites. To the right of the central human figure with out stretched arms, there are motifs which are mainly made up of line figures- both human and elk. More space was given around the human and running elks' motif. Thus, the similarity of their designs suggest that humanity and moving elks share a symbolic meaning in the minds of the painters, as the moving elks, shown in figure 7.18 are 'running towards' humanity, or away from them.

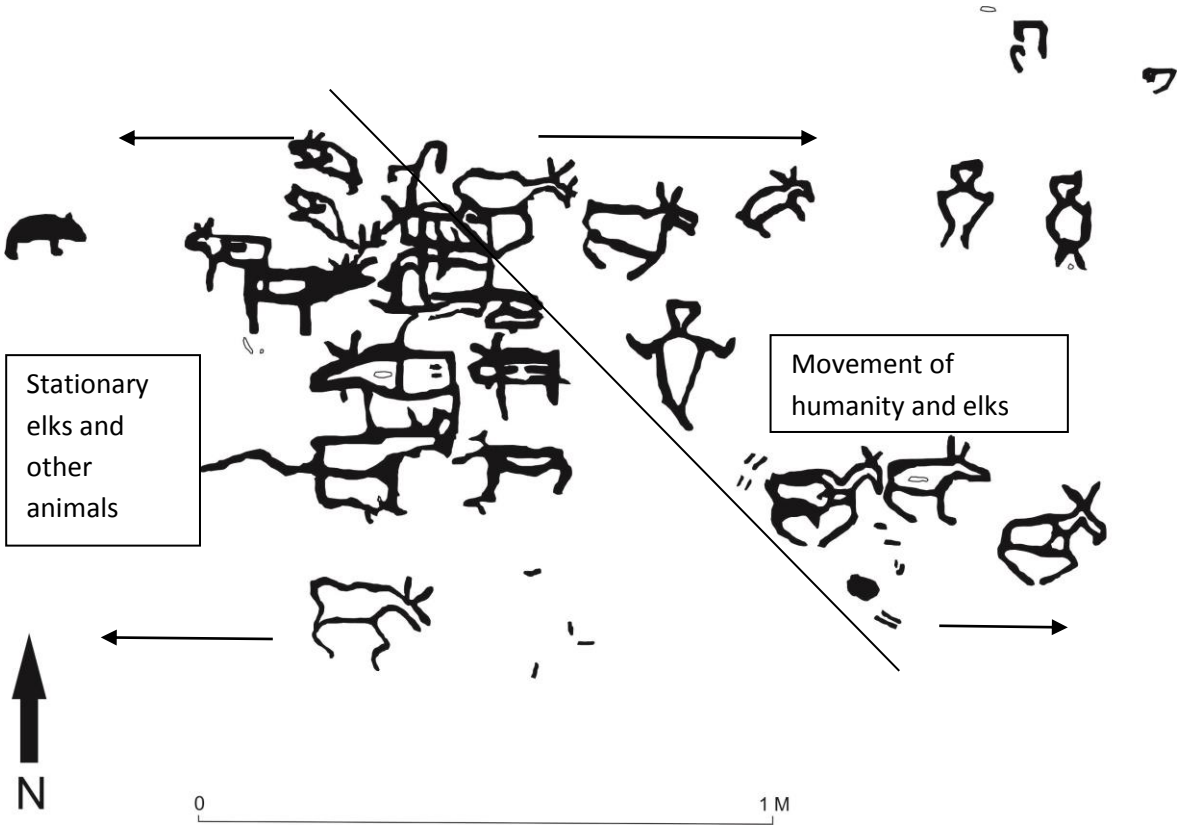

Figure 7.18 The contrast between stationary elk/other animals and humanity and moving elk motifs.

On the other hand, to the left of the central human figure are stationary elks, which are mostly facing the opposite direction and are tightly bunched together (drawn using heavy thick paint). Here, opposite meaning is being created, which reinforces the meanings of humanity and moving elks. The beavers on this left hand zone, like the moving elk, are also moving away from the main stationary block of elks. The bear faces the same direction as the stationary elks and is drawn in a similar way-but is separate from the rest of the narrative.

Finally, the role that the other two animals play in organising and structuring the meaning of this panel is shown as these two design elements are added later. Again, if the static elk zone is the original carving region, then all the other motifs have been added later. Thus, the two beavers are like the elk moving away from this centre. It is suggested that the symbolic use of beavers (if, in fact, they are beavers) is that they live within water that is continually moving,

and provides another analogy of time. The bear, which is on the far left of the scene, is drawn away from all the masses of elks and other animals-and is drawn with the same heavy block colour. However, it is argued that the relationship of the bear is with the other animals and not the elk, as the beavers are contrasted with the bear.

In summary, this site shows the general interplay of the main discourse themes of elk, humanity and other animals. Furthermore, another dimension was added to the discourse themes in relation to movement, and by extension time. Elks can be stationary or moving which, it is suggested here, related to the passage of time. Finally, another issue has emerged, which deals with directionality; running elk are moving eastwards as at other sites in the region, whilst the stationary elk face the other direction. Thus, when time 'moves', it does so towards the east. Humanity, and its representation in a simplistic and atemporal sense, provides the contrast and the centrality around which movement (and time) revolves.

7.2.6 Glösa, Jämtland

Returning to Jämtland, the rock carvings from Glösa are some of the best known in Scandinavia, and are located on the northern edge of Lake Alsen- not far from Jämtland's capital, Östersund. The carvings themselves are in a rural location, approximately 500m from the lake's edge and 350m above sea level. The most striking feature of this site is its closeness to the brook, seen in figure 7.19 that feeds into the lake- making it share some similarities with other sites, like Nämsforsm (which is also close to running water). The art was carved on rocks that are a cross-grained slate- blue grey in colour, and are generally rounded and smooth (Hallström 1960: 64). In terms of size, the motifs range from 27-67cm in length (1960, 65).

Figure 7.19 Glösa rock-art site and its close proximity to water (Retrieved from http://www.ismoluukkonen.net/kalliotaide/piirros/glosa/kuvat/2011-r0473.jpg) [Accessed on 1st April 2014].

The rock carvings at Glösa are unusual, in terms of their style, in that only elk are present. However, a duality of meaning is still maintained, since male and female elements have been used to emphasise the discourse here. This supports the general theory of meaning creation that is dialectic- since for something to be meaningful it needs to be contrasted with its antithesis. There are two main carving areas in figure 7.20, an upper and lower, with the upper section having the greatest numbers of elks. The lower section contains eight elks, two of which are incomplete-probably eroded. The rest seem to be arranged with two male elks above two female elks, and two female elks at the front. The male elks have internal organs drawn within them- with an obvious stomach connected to the mouth- whilst the female elks are represented using the minimum of detail- no antlers or internal organs.

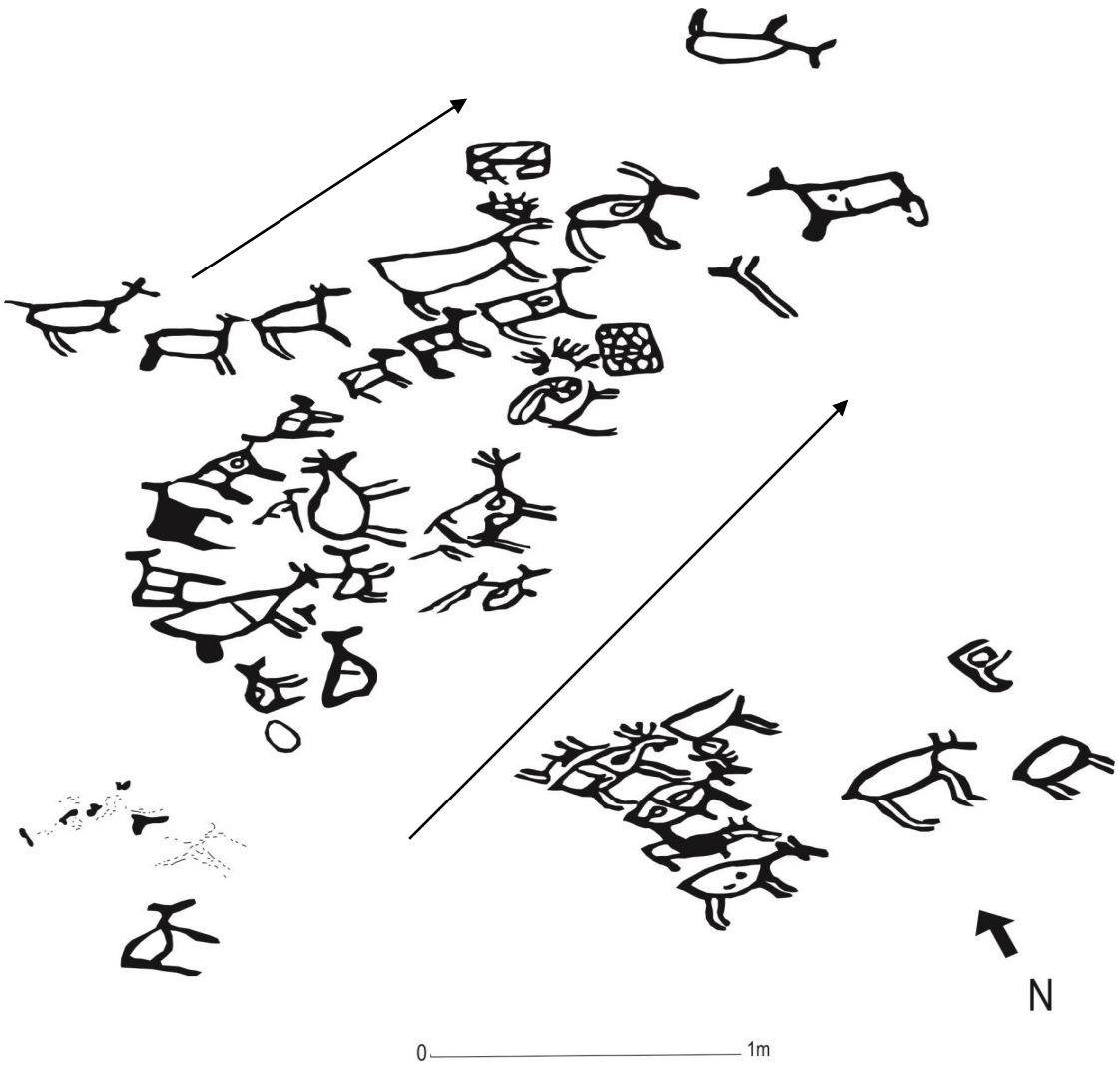

Figure 7.20 Elk at Glösa and eastwards movement.

The upper section of this panel has many more elks (22, five of which are female). All of these elks are facing the same direction, except the final elk on the far right of the upper zone, which is facing towards the others. It seems as if the carver/s have tried to give the impression of movement, as the elk arc from the bottom left, to the upper right hand side. At the very top of the carvings is a singular elk motif that was carved upside down. Towards the upper right hand side are what seem to be the two most dominant large male elk motifs. However, the way in which they have been drawn is quite different. The larger of the two has a more rectangular body and the antlers have been drawn with a higher degree of naturalism. The male elk

immediately in front of it, although it has antlers, was drawn in quite a different style with two slightly curved lines -without other branches of antler coming off. The legs are also much longer and there is a stomach sack connected to the mouth. These two elk seem to have been the central design element of the upper zone, as all the other elk seem to be moving towards these two. Underneath the two males is a continuous line of females, one that curves downwards and another that curves upward. Also, the single elk that is facing the scene seems to serve the purpose of 'fixing' the male elks at the centre of the upper zone. Below are three more male elks that lie underneath the main flow of female elks, and seem to be moving in a direction of their own- although still towards the two main centre elks. However, whilst they are moving in this general direction, they seem to still retain a certain degree of independence from the main body of female elks. Directly in front of the lower male elks are two strange motifs, which seem to have incorporated elements of the designs that have been used to represent the elks-whilst purposefully not drawing elks in the same way that the others have been drawn. The motif to the left has a rounded end with a thin rectangle to one side that has a line through it.

The lack of other motifs at this site is significant. The high degree of naturalism of carvings, along with the internal organs and 'life lines', suggest that this site is old (around 6^{th} or 5^{th} millennium BC) as, in Scandinavia, the oldest rock-art sites tend to have the highest degree of naturalism-including internal organs and 'lifelines'. This carving site shows many similarities to the carving traditions of Trøndelag, over the border in Norway. The limited number of themes and discourses suggest that, ideologically speaking, this period is far more naturalistic. Moreover, it is interesting to note that sexual dualism plays a more important role, in the creation of meaning, at these older sites. Male and female elk can, quite clearly, be seen- and the realism of the drawing is in contrast to the simplistic and ambiguous styles in some of the later period, rock-art sites of Jämtland. Once again, the movement of the elk is towards the east.

It is interesting to see that this theme seems to have already been developed at such an early period. The flow of the animals-like the flow of the water- moves from the western mountains, towards the Baltic- and seems to have been a recurring theme of rock-art in Jämtland. This is possibly related to the migration routes that the elk may have taken, moving towards the Baltic, down the river valleys eastwards in the winter, and then moving westwards back up into the mountains, for summer grazing.

7.3 Discussion

The five sites analysed, represent a good cross section of the rock-art styles from this region of Scandinavia- with older, Norwegian influenced art in the west and, possibly, later developments further east. Firstly, a major problem is whether all the rock-art sites can be analysed together- given that they were probably created many hundreds or thousands of years apart. Whilst not suggesting that the same ideology was behind the carvings at all sites, a number of interesting discourse themes seem to keep emerging over and over again.

Firstly, the basic discourse themes that were used in the construction of the narratives, are the three main discourses; elk, humanity and other/ambiguous animals (all sites either having one, two or all three present). The elk discourse is, by far, the most common theme of identity creation and, it can be assumed, that the carving and painting of this animal reflected its importance and economic uses, but also esoteric aspects of the elk, in relation to ritual practice, and organising social relations. The next discourse is humanity, with far smaller numbers than the elk, which, perhaps, shows that humanity and human activities were not as important. Finally the other/ambiguous animal, which may have been the origins of the later boat motifs, is the final discourse theme.

The next issue is related to style, which allowed an intertextual relationship between different rock-art sites in the region. Since the genre of any text is created through style, there was clearly

a desire to create different types of narratives using different stylistic devices. The first style from the region is termed naturalistic (it created a genre grounded in the physical and natural world). The basis of this text type lies in the past- and further to the west in Norway. The features of this style are a greater emphasis on creating motifs that look like what they are- with an emphasis on realism.

The second style is termed stylised, since it is the creation of motifs that are simplistic, rather than naturalistic. The simplistic style is connected with the representation of humanity. Finally, the third style is what is termed ambiguous (or perhaps abstract) style, since it is often unclear what the motifs are, or what they were trying to represent. The purpose of this was to create a genre of, somewhat, abstract rock-art. This style is often found when small mammals, birds or beavers are carved/painted. There is also a possibility that boat motifs are being (ambiguously) represented as well. Thus, three styles were used to create three genres that were connected to certain motif types; naturalism with elk, stylised/simplistic with humanity and ambiguity with small 'other' animals. Naturally, when identifying style and genre in Neolithic rock-art motifs, there will be a certain level of arbitrariness, but the method of carving does seem to reflect a desire to differentiate the art using different styles.

Having found that certain types of style are connected to the representation of specific animals, attention can be turned to more complex and detailed aspects of the narrative themes, which help to give the basic discourses a deeper, richer and more meaningful dimension. Sexuality seems to have been an issue and an important theme, but not that of humanity. The sexuality of the elk- since the style is naturalistic,-is the clearest, and it should be expected that the carvers regarded the sexualizing of elk as important for their meanings in the creation of their identities. At the older and more naturalistic sites, there is often a more extreme sexual dimorphism; male elk have huge antlers and often chin tufts and are larger, whilst female are smaller and lack antlers. Also, there tends to be more females than males (which is consistent

with Tilley's observations at Nämsforsen). However, as time progresses the naturalism of the elk, along with its sexuality begins to diminish. Although most elk seem to be female as argued by Tilley (1991; 1993b), males are also found.

The next theme, connected to discourse creation, is that of movement. Sjöstrand (2010) has divided the rock-art at Nämsforsen into surface pecked (where the whole inside motif is pecked out) and outline or contour pecked (believed to be later). Surface pecking is mostly found with straight-legged elk motifs that are stationary. However, most significantly, nearly all angled legged elk are with contour pecking. This is argued to reflect wider issues surrounding mobility and stability in Neolithic Northern Sweden (Sjöstrand 2010, 148). The rock-art from Jämtland also shows that there was a desire to articulate movement, and, it is suggested here, that it is where the elk were moving to, that was of central importance.

Directionality, and the flow of water, is a common theme of the rock-art in Northern Sweden. As a general rule, elk motifs- when moving- tend to be going towards the east. Sjöstrand (2010, 140-141) notes that most of the art at Nämsforsen is carved on southern facing rocks-thus the majority of the art is aligned along a west-east axis. At Nämsforsen, due to the complex nature of the art- along with the probably complex historical build up- there does not seem to have been the same concern for elk facing either one way or the other. However at the more simplistic rock-art sites in Jämtland, elk that are stationary often face west, whilst those that are moving, tend to be moving eastwards. This is significant since this, possibly, links the art to the flow of water that is flowing from the mountains in the west and Norway, towards the east and the Baltic Sea. Thus, east-west movement of elk motifs, the flow of water and the movement/stable dichotomy of the elk, seems to have been part of the overall discourse surrounding elks in relation to the people who depended on them. Here the elk may have been a metaphor for people's journeys between different parts of Scandinavia- as part of their own seasonal rounds as hunter-gatherers.

Furthermore, the three main discourses- elk, humans and other animals- may be connected to landscape metaphors. Firstly, elk are mainly land animals and, thus, part of the landscape (but they can swim when necessary). They are more often female, but some are male. When elk are stationary they can often be found facing towards the west, whilst moving elk seem to be travelling towards the east- although there are always exceptions to this general rule. Here is a connection between directionality, movement, and the landscape. Since rock-art is mostly found next to open or running water- moving from the western mountains towards the east and its final destination of the Baltic Sea- it is thus aligned on a roughly east-west axis. This is in contrast with humanity, which is often stylised and simplistically drawn- lifeless and facing the viewer without directionality or, for that matter, temporality. Rather than being explained as a lack of technical skill, it is suggested that humanity, and its stylised form of design, is metaphorical for temporality. Furthermore, humanity, like the elk, dwells on land but also travels by boat- having both characteristics of the elk, and also of the birds that can move on water. This point is significant, since the people who would have exchanged goods with the inland hunters would have travelled along the coast and up the rivers to Jämtland, during the Neolithic period. As it is the inland hunter who seems to have been making the art, it may, therefore, be argued that humanity is being represented as atemporal, static and connected to the elk as another land 'animal'. The stability of the elk, in some scenes, is further emphasised by the fact they are facing towards the west and mountains that would have appeared to be unchanging in the eyes of the carvers- as opposed to the Baltic Sea and the water that would have flowed into it. This elk symbolism is in contrast to the birds, small mammals and boat that travelled across water and sky.

The final discourse of other small animals-abstractly and ambiguously drawn- may have had a relationship with water, fluidity, movement and the east, at the rock-art sites. The other animal's discourse is suggested as a reflection of the fluidity of water and waterborne animals

that are often being represented. Birds and beavers spend a lot of time in water, and it is the ambiguity of the classification and representation of small mammals in Jämtland, which reflects its connectivity to water and the metaphor of fluidity in their carving styles. Here, along with the stability versus movement dichotomy, there is a further realism versus fluidity, land versus water, discourse. The emphasis of this discourse is fluidity, not only in terms of animals, but also its connections to boats, birds and, ultimately, air and shamanic performances (where birds and boats 'fly', as part of those rituals). Thus, the ambiguity of this carving is connected to the lack of barriers or limitations that exist in the air and, to a lesser extent, on water.

Finally, having shown how the art created discourses, themes and styles, what is needed is to investigate some of the possible implications of this, in relation to dominant or dominating discourses. Since this discourse analysis is critical, there is an attempt to find out what the art tells us about a) dominating discourses and b) those who are dominated. Rather than viewing power- as is often the case in contemporary research- as Machiavellian or overly cynical, the issue of power in prehistory can help understand social processes and changes at a deep level, by being more realistic in understanding the past. The ability to create and dominate discourse is one of the most important aspects of any social system, whether in modern mass media or Neolithic rock-art. Thus, the first question must be, did dominant groups or more marginalised peoples create the rock-art? Bradley (2000) observed that the location of rock-art sites in Bronze Age Scandinavia was away from settlement areas, which may have restricted access and would have allowed certain individuals to control the art and the knowledge it contained. In this sense, rock-art could be considered a feature of dominant ideology-at least in the Bronze Age.

On the other hand, Sognnes (2001) has also shown that whilst the Bronze Age sites over the border from Jämtland- in Trøndelag- were often located in more concealed locations in the landscape, the earlier hunting scenes often favoured more exposed positions. This suggests that

the nature of hunter-gatherer society was less concerned with top down hierarchical power, as it seemed to lack the hierarchy of Later Bronze Age social structures, which were projected into ritual practice. Given the fact that the production of this northern elk based rock-art ends with the full adoption of agriculture in the Bronze Age, it may be argued that the expression of elk or 'elkness' was an attempt, by hunter-gatherers, to express themselves in the face of changes from 'Neolithic' groups coming from the south and east; the art was an attempt to define their group identities through discourses centred in the elk. The oldest rock-art site at Glösa contains only elk which are stable and real, but as time progressed more discourse themes are added, as there appears to be an emergence of more complex and less stable discourses. The art often depicts numerous competing discourses; elk, humanity and other animals, which are carved according to different styles; naturalistic, stylised and abstract. The naturalism of the elk, and its westwards static positioning, was an attempt by the carvers and painters to create a metaphor for stability and going against the flow of time-which was conceived as water. Their ideology may have conceived the mountains in the west as their origins-both of the water in the lakes and the rivers, but also the elk, the hunters and the slate they quarried in the mountains. The stylised, simplified depictions of humanity-with their lifeless atemporality-may have symbolized a desire to hold on to stability. Finally, the other animals and the abstract representations-along with the movement of elk towards the east and the Baltic- shows us that time and change, like the flowing water, moves towards the east, and the ambiguity of the future for the slate culture groups.

To summarise, the three discourses themes may have been utilised as a means of identity creation based on elk, humanity and other animals. These three motifs seem to have had a temporal dimension and used one of three styles; naturalistic, stylised and ambiguous. This was a further means of supporting discourses related to phases of time and temporality. These carving styles and discourses have been linked to a number of sub-themes, such as movement

or landscape metaphors. Surface pecked rock-art is thought to have had a long chronology, whilst contour pecking seems to be later. Most moving elk are contour pecked, or painted, with stationary elk showing both styles. In Jämtland, most elk are moving to the east, whilst stationary elk are looking westwards. The second issue is sexuality, which can only be considered as playing a minor role in the rock-art narratives. Human motifs were just as easily left unsexed, but there are also instants of adding features that sexed the motifs. With regards to elk, the issue seems more important- and this suggests a greater part of their meaning depended on whether they were male or female. Whether or not the elk are symbolically female, still remains a difficult issue. More elk are female than male so it seems that perhaps elk could have been associated with 'femaleness'. What is probably a more important issue, however, is why the sexing of elk was more important to people in the Neolithic, than the sexing of humanity-both in Jämtland and at Nämsforsen.

Finally, the last sub-theme seems to have been connected with directionality, movement (which was explored as the first issue) and landscape. The elk are realistically drawn and are often moving east, along the same course as the rivers and lakes. The stationary elk, which often (but not always) face westwards, are looking towards a mountainscape of rock, stone for axes, stability and, perhaps, origins in the minds of the carvers. In contrast, ambiguous 'other' animal motifs, and their habitat in the air and on/in water, suggest a connection to its fundamentally unstable and ambiguous nature. The linking of these animals and their water and sky associations, may also have been a powerful metaphor for the future- in contrast to the stability of the elk, the mountains to the west, and the slate that those mountains contained.

7.4 Conclusions

At the beginning of this chapter, the reasons why discourses, in prehistoric rock-art, should be investigated were outlined. *Discourse* is the linchpin between social structure and agency, since it is through discourse that structure can influence and have affect upon human agency. Rock-

art, as a visual discourse, brings the panels to life and sees them as part of a total Neolithic system of understanding-where social action and agency directed meaning through social structures and played out in visual narratives.

In Northern Sweden during the Neolithic, three main visual discourse themes were used; the elk, humanity and small other animals. Each represented one aspect of the visual discourse that engendered their agency. To further emphasise these discourses and the discursive nature of human understanding, the carvers created these carvings using a number of stylistic devices that have been termed naturalistic, stylised and ambiguous. The use of style is a powerful tool and emphasises certain features of the discourses that the carvers thought were important. Elk are associated with naturalism and realism, humanity, with stylised and simplistic representations, and small 'other' animals, with ambiguity. In each case, style reinforced that discourse theme and the identities that were created, as a result. Rather than having one defined identity, the carvers had many identities that they expressed in the rock-art. Perhaps tentatively, it is suggested that the elk discourse represents the past, humanity, the present and ambiguous small animal represents the future. The flow of time and the direction of water would also serve to reinforce this. Connected to this theme, is movement and directionality. The movement and direction of elk was an important theme for the carvers. Elk, when they are moving, seem to be moving towards the east and, in some ways, are analogous to the movement and flow of water from the Scandinavian mountains, in the west, to the Baltic, in the east. This metaphorical linking of the elk to the flow of water is, perhaps, linked to the movement of slate from the quarries in the west to be exchanged with agriculturalists, or pastoralists there. The issue surrounding exchange between hunter-gatherer groups of the interior, with Neolithic peoples from the south will be explored in further detail in the next chapter.

CHAPTER 8

Rock-art, agency and the movement of stone and slate

8.0 Introduction

This chapter will attempt to investigate the link between prehistoric rock-art and agency by focusing on the movement and exchange of stone around Britain, and slate around Scandinavia. In chapters 4 and 6, rock-art in Cumbria and Jämtland was created according to an underlying structure- and whilst its original meaning cannot be uncovered, the art was still meaningfully arranged. In chapters 5 and 7, the next stage was to show how the structure of the rock-art influenced the type of discourses that the artists attempted to create. In this research, discourse has the specific meaning as a link between the art's projections of social structure, on the one hand, and agency on the other (since social structures, and their principle features, are often 'played out' using discourses). As already mentioned, discourses are not only a means of identity creation, but they are also a reflection of how people understand and know how to act in a given setting. Thus, if structure is the most abstract, and discourses less so, then this chapter will deal more with the concrete and real dimension of the art, its agency and how it facilitated people's social action- *vis-à-vis* real world Neolithic concerns. Methodologically, agency represents the third phase of analysis-, dealing with the most 'solid' dimension of prehistoric social life, agency and exchange networks.

In the first part of this chapter, the movement of Cumbrian axes and the Neolithic exchange networks will be outlined. In chapters 4 and 6, the rock-art sub-contexts such as environment, human/environmental interaction and archaeology were linked to create an overall context into which the art could be understood. The next stage in analysing the art is, therefore, to bring all of the evidence together, by focusing on one of the most important aspects of both regions-the production, movement and exchange of stone, or slate, during the Neolithic. Since both regions share this common feature, there is a need to investigate the relationship between stone

exchange networks and rock-art, in more detail. This leads on to the second point that there may have been a connection between rock-art and stone/slate, in terms of materiality. The collection, processing, and final exchange of stone- in both regions- seems to have led to the carving and painting on rock (which, perhaps, suggests that rock-art played some part in facilitating this process). Thirdly, both regions are marginal, in terms of Neolithic development in agriculture-but, at the same time, they are still central to Neolithic developments- as sources of stone. In Britain, there is still a tendency to see remote upland northern and western regions as liminal, marginal and apart. However, by focusing on the movement of stone, such regions can be shown as integral to the Neolithic.

Part two will deal with exchange networks between Northern Sweden, Norway, and Southern Sweden, during the Neolithic (it is argued that this may have been a possible factor for the creation of the rock-art). Part Three will specifically investigate how, through agency, rock-art helped to create the conditions needed for exchange to occur. In the Neolithic, the movement and exchange of objects allowed, possibly, a more important exchange of ideas surrounding identity- and the creation group/cultural boundaries- to occur. Rock-art in Jämtland may have been situated across one such Neolithic culture boundary. Whilst accepting that art adds meaning, value or prestige to the object, the assumption is that these exchanges could still have taken place without the art. Gell (1998) has shown art to be a 'technology of enchantment', and fundamental to the process of exchange. Thus, it will be shown that the emergence of exchange networks-both in Britain and Scandinavia- could not have happened without the art, as a means of facilitation. Methodologically, the approach, here, will try to show how rock-art and exchanges were linked together (archaeologists and rock-art researchers tend to view these two issues separately). The goal of this chapter, then, is to elevate the status (of prehistoric art) from a merely a product of exchange, to the centre of such interactions.

8.1 Rock-art and the Cumbrian stone axe

The Earlier Neolithic in Cumbria (4000 to 3300 BC) marked the beginning of the collection, and exchange, of stone axes from a number of British and Irish sources ((Brown 1997; Cummings 2002; Pitts 1996). The evidence of this has been outlined in chapter 4). However, the emphasis in this chapter has shifted, and the concern is now how the art made possible the collection and exchange of stone axes. Although Cumbria was the region from which most stone was quarried, other regions served to supply a polished axe exchange network that placed a growing importance upon green stone from these regions- often ignoring local sources of flint. This highlights that movement, or exchange, in the Neolithic cannot merely be conceived of as 'economic', in the modern sense. Bradley *et. al.* (1992, 223-4) has shown that, in many cases, studies have been too focused on economic aspects of axe distributions. Furthermore, practical discussions have often reflected on the stone axes' merits as work tools. Thus, in order to escape such understandings, more recent approaches to the exchange of stone axes during the Neolithic have focused on reciprocal gift giving models, drawn from the ethnographic literature and cultural anthropology (Graeber 2001; Mauss 1954; Sahlins 1972). This is an improvement and a more 'sensitive' approach to the possible social structures of non-Western, and non-capitalist groups.

Value in non-capitalist societies tends to be linked to ritual and supernatural agency, rather than efficiency of production. Bradley has suggested that the motivation behind the collection of stone was, as time progressed, often its remote and/or dangerous location (Bradley *et. al.* 1992, 224)-which may have given the stone a greater value. The knowledge of where to get the stone, the correct rites to the Gods, and the proper way to treat axes in the polishing process, would have also added value to the stone axes. Here, rock-art may have been part of the ritualisation process, adding value to the stone, which seems to have become more institutionalised as the Neolithic developed.

The period from 4000 BC onwards, saw a high proportion of the known stone sources in Cumbria being used. It was not, however, until after 3400 BC that the stone travelled far outside the region (Bradley & Edmonds 1993). The choice of more dangerous locations, to collect the rock, seems to have been a Later Neolithic development since, according to Bradley, 'there was a shift from the use of readily accessible outcrops, and a corresponding change towards more intensive methods of extracting and working the stone' (Bradley *et. al.* 1992, 224). It seems that, initially, the collection of rock at the Langdale quarries was not specialised and, perhaps, would have been collected during short periods of time (probably in Summer), in an area that would have lain just above the Neolithic tree line (Bradley 1986).

During this earlier period in Cumbria, a shift of emphasis- away from the coastal regions that had been the main focus of activity during the Mesolithic- occurred, to a greater focus inland, along the River Eden. Whilst coastal sites were still used for polishing stone during the Neolithic, the evidence of a growing presence to the east of the Central Fells suggests a growing importance of the routes and exchange networks over the Pennines (Bradley & Edmonds 1993, 157-164). This is further emphasised by the process of monumentalisation of the landscape that occurred in parallel-not only in North Yorkshire and the Wolds, but also on the similar limestone above the River Eden.

Bradley and Edmonds suggest that, after its Early Neolithic peak, the production of axes reverted to a less intensive phase, and some quarries like those at Pike o' Stickle came to an end (1993, 180). Furthermore, at sites like Dungeon Ghyll, the second phase of production saw the reuse of stone that had been leftover from the earliest quarrying activity. Thus, the Later Neolithic period saw a number of changes, not only in terms of the quarrying for stone, but also in other areas of social life. It also featured changes in burials- from group inhumation to individual burials, the change of the function of enclosures into defended settlements, and a

change from local movement and exchange of flint, to the movement of flint from upland regions (1993, 178).

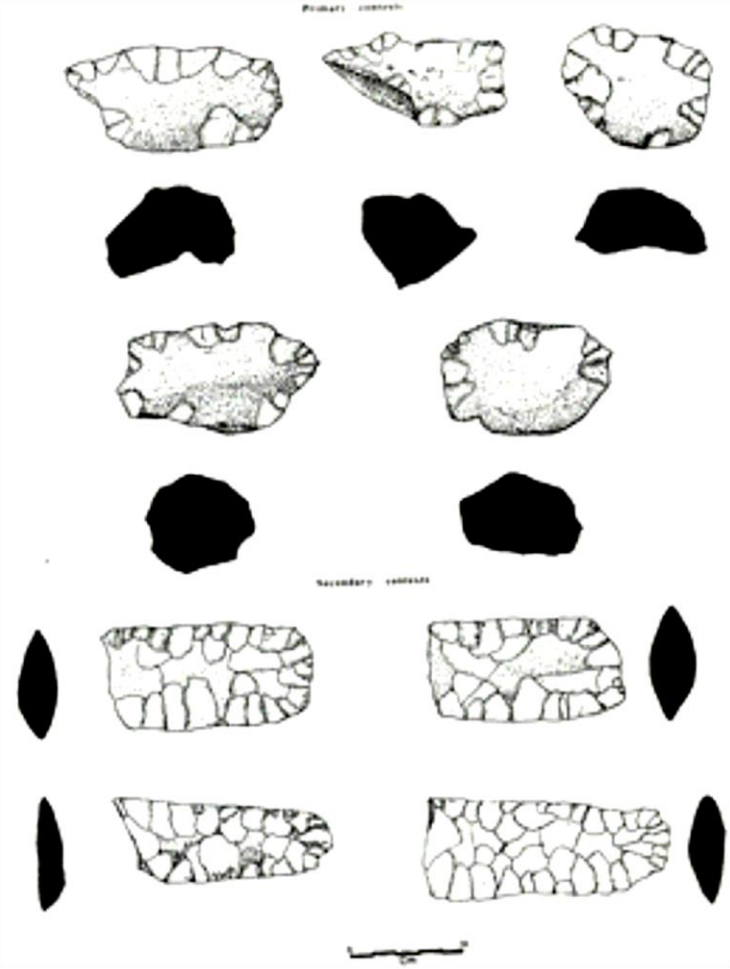

Figure 8.1 Changes in the morphology of axe rough outs from Dungeon Ghyll, Cumbria. (Bradley & Edmonds 1993, Figure 7.1).

By the Later Neolithic period, a change in the meaning of the stone axes may have occurred. This is seen by the later trend of making ornaments, or mace heads, from stone axes. This seems to emphasise that the stone axe was not seen in any practical sense, and that the value placed on it was not purely linked to its efficiency as an axe. Moreover, it may have been during the Grooved Ware period that the 'supernatural' -and its perceived distant origins (both real and imagined)- became commodities in their own right (1993, 189). Distance and obscurity became significant and added meaning and value to objects. By 3000 BC there seems to have been a need to differentiate social status, through competition for exotic goods from distant

areas (1993, 192). The Grooved Ware phases may have been an impetus for the second period axe production-seen at the quarrying sites in Cumbria- when increasingly more dangerous and remote locations, in the mountains, were being exploited (Bradley *et. al.* 1992, 224). The Grooved Ware issue seems significant since it links in a number of key features of the Middle to Later Neolithic period and, possibly, links the growing importance of the Eden Valley, to developments that were also occurring in Yorkshire, at the same time.

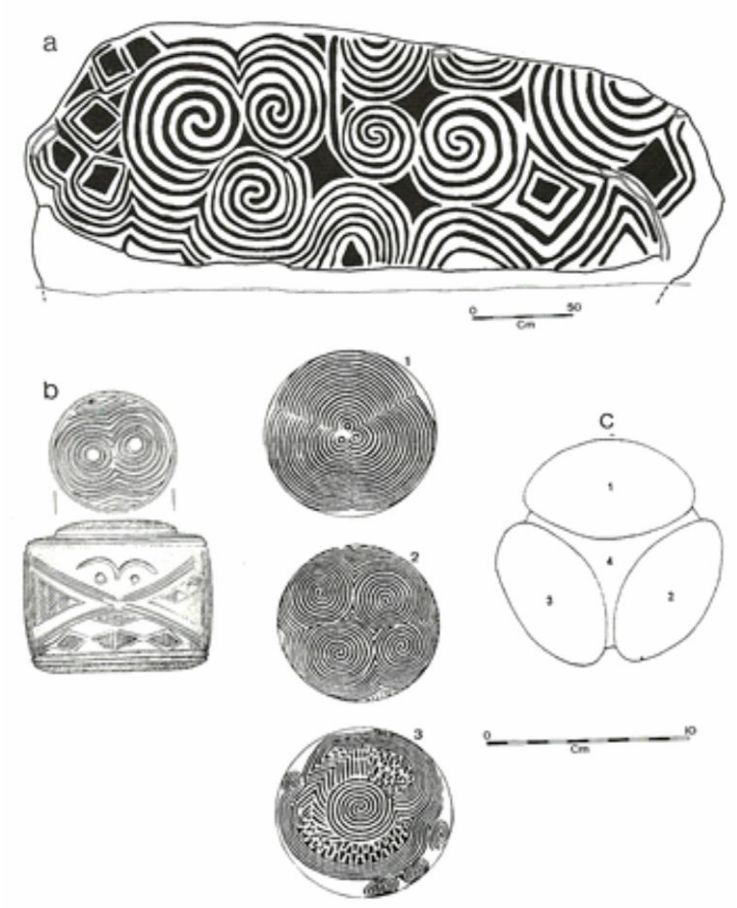

Figure 8.2 Examples of styles which are shared between Passage grave and portable objects. This style seems to have been reproduced in a number of different media including monuments and Grooved ware pottery. (Bradley & Edmonds 1993, fig.9.5).

Moreover, the emergence of Grooved Ware in the British Isles is linked to the growth of ceremonial centres such as henges and stone circles, which may have replaced early enclosures as centres of ritual practice. The connection between Grooved Ware and stone axes, many of

which were Cumbrian, can be seen in Yorkshire and as far south as East Anglia. A major route for stones axes out of Cumbria was probably along the route of the modern A66 over the Pennines. There are also other routes out of Cumbria to the north and north east which contain monuments such as the henge at Mayburgh.

Figure 8.3 Looking west on the A66. This road follows the most logical route out of Cumbria towards the east and over the Pennines. (Photo R. Smith).

The henge monuments of Cumbria seem to make reference to Yorkshire, since there is a greater concentration of this monument type in Yorkshire- and especially in the Vale of Pickering- than in Cumbria. Stone circles are more common to the west of the Pennines. Therefore, perhaps stone circles are to Cumbria what henges are to Yorkshire. The location of the stone circles seems to be on the main routes out of Cumbria and into Yorkshire. Stone circles lie on routes into the quarrying centres themselves, and some of the stone circles are associated with finds of Group VI stone axes (Burl 1988; 2000)- as well as at henge monuments, like Mayburgh.

The stone circles and henges not only make a link to the landscape, but also attempt to link themselves, conceptually, to earlier periods in time. The large stone circle of Long Meg and her daughters is located next to an existing earthwork that may be related to an earlier causewayed enclosure (Bradley 2007, 136). Thus, to understand the ritual monuments (and the art which some of them contain) there needs to be an understanding of the temporal dimensions of these monuments (argued to be linked to a general 'abstraction' that was taking place in the Later Neolithic). Abstraction, here, is linked to a growth in complexity as the Neolithic moved towards the EBA. Social structures and Neolithic discourses became more complex, which is also seen in agency that placed more value in complexity, at a social level.

What seems to have been more important is that a growth in complexity and abstraction is linked to the creation of ever more complex ideologies. The 'idea' of Grooved ware (rather than the actual pots) and what it may have represented in terms of a new expression of ritual practice of the Later Neolithic, is what became important. Thus, an increase in movement and exchange would suggest a greater emphasis being placed on space. It was the ability, however, to make reference back in time, which gave value to this more abstract ideology. The relationship to the supernatural, and to distant origins, is actually shown by the fact that 85% of stone axes found with Grooved Ware, come from highland sources (Bradley & Edmonds 1993, 189-192). The act of movement and of being able to make connections to distant places shows how, through ideology and abstraction, agency could be ritualised and connected to the past, in order to create a commodity. It is at this point that rock-art facilitates the value process of stone axes- since it was the claim to distant origins in time that gave the objects their power.

One of the distinctive features of the Later Neolithic was material culture that developed in one part of the country and was then copied in another (1993, 198). This process was not only applied to reproducing the same repertoire from one region to another, but also the reproduction of those features onto other types of media. Thus, the link between the stone-axes, monuments

and Grooved Ware was held together more ideologically then physically. It was through the changing styles of art that such ideology was expressed. Later Eastern Cumbrian rock-art found on monuments formed links with megalithic art and, possibly, Grooved Ware. These developments may have had their origins, however, in the simplistic and naturalistic rock-art of the Central Fells-since more complex and abstract ideological statements needed to make reference to earlier and more naturalistic sources of power. Thus, agency and power was not found in the natural world, but was gained through the correct ways in which such resources could be manipulated to produce more and more complex, and abstract, ideological statements and discourses.

Although it may be possible to explain the later developments of rock-art, and its association (in terms of style) with wider Passage Grave and monumental art, there is evidence that the art in Cumbria was an alteration of rock-art styles that existed in the county in the Earlier Neolithic period. This shows that social change is a dual process of both external influence and internal pressures, related to social complexity. The next section will explore the exchange networks of Northern Sweden, during the Neolithic period, to show how art was a means of facilitating exchange (both objects and ideas) on the other side of the North Sea.

8.1.2 Jämtland and the 'Slate Culture'

The people who lived in the region of Jämtland followed a way of life that could be considered as a continuation of Mesolithic social practices, by hunting and gathering their food and making flint knives from quarries in the Scandinavian mountains. In response to a growing complexity in social relations- and the introduction of exchange with southern Neolithic groups- it was these hunter-gatherers that made the rock-art. A large number of TRB polished stone axes are known to have circulated amongst these groups, meaning they were beginning to incorporate Neolithic technologies into their overall repertoire. The creation of rock-art was a further

expression of the growing need to develop an ideology in completion with Neolithic ideas spreading north.

The beginning of the 4th millennium BC saw the introduction of agriculture into Southern Sweden. It is uncertain whether such changes represented different people moving into the region, or simply local groups experimenting or adapting novel items to fit their local needs. Although there have been extensive studies that seem to suggest that there may have been changes in populations and migration of Neolithic people (Haak *et al*. 2010; Malmström *et al.* 2009; Skoglund *et al.* 2012), such studies tend to draw large scale conclusions from data sets that contain small amounts of evidence.

Rather than emphasising the division between the two worlds, Hallgren (2012) suggested that the changes in the material culture are more of a process of local adaptation and/or innovation than a result of separate groups with competing ideologies. Furthermore, the continuation of Mesolithic technologies and ways of life, in the more mountainous regions of Northern and Western Sweden, should not be considered evidence of the existence of isolated hunter-gatherer groups. This is important in Scandinavia since the existence of the Sami peoples, into modern times, is often used as evidence (and a framework) for isolated nomadic peoples that were separate from the farmers of the south. Therefore, having called into question the static division between 'Neolithic' and hunter-gatherer groups, what is needed is an investigation into the nature of exchange between peoples who were simply pursuing different economic strategies, from those used further south. One of these was the collection and production of slate knives and tools.

Jämtland is home to slate quarries, which were used to make slate knifes and tools (Alseker 2005; Søberg 1987). Many of the rock-art panels lie along (water) ways into the mountains and, ultimately to Norway, which may have connected trade routes moving east and west. Hallgren (2012) suggests that the Norwegian coast was a region of specialist slate knife

production, with the quarrying of the stone coming from Jämtland (2008, 3). Goldhahn has shown that Nämsforsen was also the site of red and banded slate knife production, which has produced more than 100 daggers from the site, in various levels of production. It is not clear, however, whether this slate was found in Ångermanland (as river run off)- like greenstone in lowland Cumbria-or if it was quarried from Jämtland as well (Goldhahn 2002).

The association between rock-art and slate knife production has recently been emphasised by four painted surfaces found in the far north of Sweden. The painted motifs at Finnforsberget in Västerbotton, to the north of Nämsforsen (Goldhahn 2010, 112-114), are a collection of the usual human and elk depictions-although there are some possible fish (salmon?) motifs, as well. What is interesting is that the rock-art site is also a quarry for quartzite, along with quarrying waste and, in situ, hammer stones. This suggests a link between the collection and quarrying of stone, rock-art, and the act of making stone tools- both here and at Nämsforsen, which was apparently highly ritualised.

Figure 8.4 In situ hammer stones and debris (left) and the fish rock-art from quarry at Finnforsberget, Northern Sweden (Goldhahn 2010, Figure 8.4).

The site at Persmyra, near Rødsmoen in Eastern Norway, is located close to Jämtland. It is significant that the people here (of the Slate Culture) were using stone axes that originated in Denmark and Skåne. Interestingly, TRB stone axes seem to have been ritually deposited in the

same way that slate tools-quarried in Jämtland and polished in Norway- were deposited in the south (Hallgren 2009, 149). This suggests that, although the subsistence strategies followed by the groups may have differed, there was perhaps some underlying unity in their respective worldviews.

A second issue is the high concentration of polygonal battle-axes of the TRB -along the watercourses and along the coast of Northern Sweden, which suggest that exchanges may have taken place along these routes. Although Hallgren suggests that the scale of this exchange was difficult to ascertain (due to lack of field work, remote locations and damages to the main rivers of Jämtland and Ångermanland -by hydroelectric power), what little fieldwork has taken place suggests that large numbers of TRB axes were exchanged (2009, 149). The stone axes seem to have been reworked and utilised as cores to be worked into smaller tools for life in the northern forest, such as arrowheads and scarpers. What seems to have been a more important development of the Neolithic in Scandinavia (both north and south) was the growing reliance on stone from certain places, often overlooking more local and easily available sources. The use of Danish stone in Northern Scandinavia must have carried with it certain meanings- especially since the stone was polished into axes before being used to make tools needed for forest life.

The exchange of stone was not only north-south, but also took place along a west-east axis. During the Neolithic in Trøndelag, Norway, although the local slate is grey and white, the majority of slate knives are made of red and banded red/green slate from the Scandinavian Mountain and possibly Jämtland (Søberg 1986, 282). The reworking of flint from southern TRB farmers- by the northern hunters of the Slate Culture- suggests that many groups in Scandinavia seem to have been part of a wider exchange system that linked most of Scandinavia. However, the scale of this production and exchange is not on the same scale as the distribution of stone axes from Cumbria around Britain.

The evidence seems to suggest that, like the Earlier Neolithic period in Cumbria, the Earlier Neolithic in Northern Sweden saw a mostly internal consumption of slate knifes and tools, as stone from slate quarries in Trøndelag and Western Jämtland moved to the Norwegian coast, for processing. Alternatively, the groups making slate tools at Nämsforsen may have been sourcing the stone from the coast, as red and banded green slate can also be found here. However, it seems that stone sourced from the mountains may have also been favoured. Again, as in Cumbria, a desire existed to use stone from specific sources over those that would be more accessible (Hallgren 2009, 146). The favoured stone of this period was the red and green banded slate, found along a fault line that goes from Finnmark, in the north of Norway, down into Sweden- with large sources located at Sjoutälven in Ångermanland, as well as in Jämtland (2009, 145). Thus, Northern Sweden and the corresponding areas of Norway seem to have been engaged in a regional exchange network where slate, from specific quarries along the Scandinavian mountains, was transported and exchanged with stone smiths in Norway.

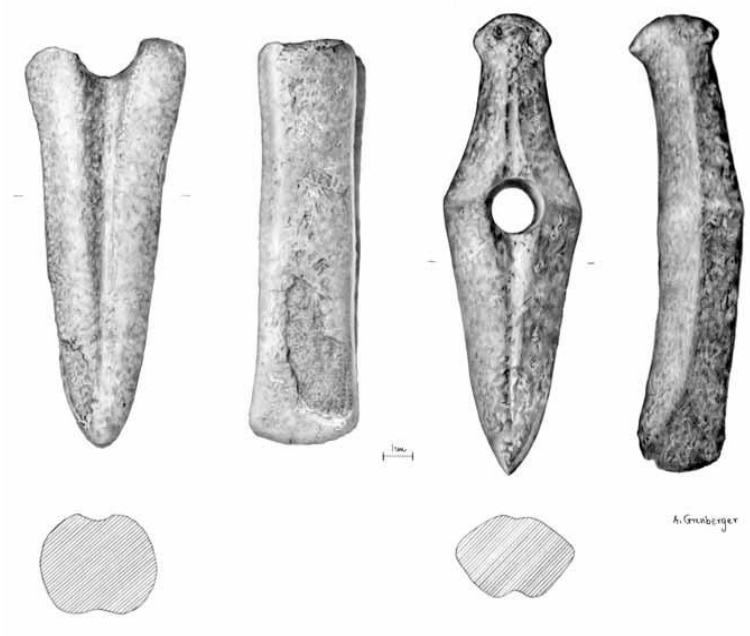

Figure 8.5 Examples of TRB axes which were exchanged with slate-culture peoples to the north. (Retrieved from http://vikeningarna.blogspot.co.uk/2008/01/trattbgarkulturen.html) Accessed 3rd June 2014].

8.1.3 Summary of the Cumbrian and Jämtlandic exchange network

At one level, the scale of the exchange of Cumbrian stone- across Britain- was far larger in scale than any exchange networks that existed between the TRB and the Slate Culture (although recent field work suggests that this exchange may be more extensive than first thought (Hallgren 2009)). Also, exchange of stone can be seen to have moved in both directions in Scandinavia, whilst the evidence in Cumbria shows that the stone generally moved from the high fells to other areas and out of the county.

Both regions share a common desire to exchange stone and flint, sourced from quarries often at some distance from settlement areas and production sites. In many cases, this 'exotic' slate was favoured over local flint. The collection, movement and processing of stone established exchange networks over large distances, and brought together communities of people who lived off the land in very different ways-but who still formed part of the same interaction. What joined them together, it is argued, was the rock-art- located at specific and significant points (both in time and through space)- which the stones made between their collection, processing and distribution. It is the role that art played in this exchange process- and the human agency that drove it-, which will form the next part of this chapter.

8.2 Agency and art

The first part of this chapter has outlined the basic pattern of exchange that existed in both regions around the time that the rock-art was created. In both areas, after the quarrying, the stone was processed and exchanged, often ending up being ritually deposited hundreds of miles away from its source. It is the purpose of this chapter to draw the reader away from the ideological and symbolic dimension of meaning-discussed in earlier chapters- towards

meaning, in a real sense. In effect, it is a totally opposite (but not oppositional) type of meaning-concerning how art, and its perceived meaning, are played out in social practice. Gell has argued that nothing has meaning except language and that art is not a visual code, but more of a system of action. Thus, the focus for researchers should be on the social context of production, circulation, and reception of the art-object (Gell 1998, 6). Jones and Bradley emphasise that the anthropological tradition, from which Gell came, was to treat art-objects as people and, as such ,can be suggested to function within the web like (or network) structure of social relations (Jones & Boivin 2010, 340). Rather than material culture as text, material culture as people may be a more suitable metaphor. Furthermore, Jones-moving towards, perhaps, a more biological metaphor in connection to rock-art at Kilmartin-suggests that Gell's anthropological theory of art should direct us towards seeing the art-object as 'nodes' within a wider social lymphatic system- which tie together special places in the landscape, to the socialised rock-art images (Jones 2006, 222).

Gell's approach of treating art-objects as 'person'- and not as texts or beautiful things- thus creates a number of methodological problems concerning how approaches can be applied to an art-object, or any iconography it may contain. Bradley (2009, 34-41) has surmised that the researcher of prehistoric art, like the anthropologist, is left with three possibilities, (a) aesthetics, (b) communication/semiotic or (c) social anthropological. On the other hand, Gell was essentially uninterested in aesthetics or semiotics, even going as far as to weaken his own arguments by rejecting any possible symbolism or meaning to the art. The extreme position that Gell takes sees an anthropological theory of art beyond all notions of beauty or meaning, and centred within a context of socially produced relationships. As a result, the power of objects is not their beauty or their meaning but their 'enchantment'. Although this term seems rather abstract, Gell's use of the term highlights the power of any art-object to draw the viewer's experience towards itself-with the view of affecting some magical outcome or operation (Gell

1998, 25). However, as Bradley quite rightly states, the aesthetic beauty of the object, and its meaning, often add to the art-object's power as an agent of social change, rather than a passive reflection of a social system (Bradley 2009, 40).

Art, from Gell's perspective, is not a semiotic or semantic code, or an aesthetic experience-, but a way of viewing art-objects as if they were human, real and have agency to affect social action. The purpose of this is to bring the person and object together in a way that emphasises art as a living experience and a technology designed to enchant the viewer (Gell 1998, 23). Thus, the power of art and its agency- at least in an anthropological setting-is at the level of performance, as art-objects are designed to affect changes in the world. Art and performance art has a special place in affecting social action in that, unlike other forms of coercion (which may be violent or otherwise) (Layton 2003, 22) art, as a technology, works on the viewer to enchant them and change them in some way. Art and landmines cause people to change or modify their behaviours for very different reasons, but, perhaps, at some level both are technologies of enchantment (Gell 1998, 21). More subtly visual, material and musical art does this by attempting to submit the viewer or consumer of the art into a network of intentionality- of which the art-object is one part. Its power or 'magic' is that it attempts to hold the viewer through the virtuosity of the artist, whereas the landmine's power relies on sheer force to get the same response (although a landmine is also a product of a network of intentionality). Thus, for Gell, it is the ability of the art to entrap the recipient into a network of intentionality- or to dazzle them- which is important and creates its power.

The key idea is that the agency of a thing is channelled through indexes that are any objects that cause a reaction or response from a person (Gell 1998, 68). In a linguistic sense, indexes are similar to the discourses that have already been explored. Next, there are prototypes that are what the art-objects, or indexes, stand for, in a real sense. This differs from the structuralist method, since prototypes (which are what, in structuralism, are called signifiers) are real,

whereas signifiers are more often ideologically constructed and are regarded, to a certain extent, as arbitrary. Instead of signification and its signifier/signified relationship, Gell's theory stresses a prototype/indexes interaction, as artists are the creators of the prototypes. Thus, unlike a semiotic approach, Gell's theory is based in reality, in all of its steps; artist, prototype, indexes and recipients have been purposefully chosen as real things that channel agency. Moreover, agency seems to be power, or energy, that runs through and animates the system.

However, it is not only the agency of the artist that is important. For example, a statue of a famous person may affect viewers or recipients through the virtuosity of a great sculpture; however, it is the great deeds of the famous person in question- along with the skill and ability of the artist to produce an accurate likeness-that is the source of the statue's power to impress or enchant. Agency does not begin with the artist, and nor does it end with the recipient. Agency is a flow of energy, or power, which works to create and configure social relations -and, which unites the social actors, locking them into the network of indexes with the people who create them.

The second key point of the art/agency theory is that icons and indexes are not just representations based in conventional use (as is the case with structuralist methodology) where meaning is dependent on conventions. A picture or iconographic representation of a tree does have some relation to a tree, but still in an abstract way. Icons are, however, not art-objects or indexes in themselves but are designs that are added to indexes. Icons, then, function as discourses since they stand between prototypes and recipients in Gell's terminology (rock-art is an iconic representation and, as such, cannot be treated as an art-object of indexes).

Further moving away from structuralism, art, like language, cannot be structured according to social conventions, rules or a grammar. For Gell, art is not caused by social conventions, since art can, and often does, create new social values and thus, new ways of being. On the other hand, social conventions cannot produce art, since art needs to have an element of originality

in order to be powerful. What is at issue here is causality, as Gell suggests that art is often free of many of the rules and social conventions that are necessary for language and communication to function. Art, one might say, is above language and social practice, and is a means of shaping it and moving in new directions.

One of the main ways in which Gell attempts to reject reliance upon language for meaning- and refocus on indexes or art-objects- is the use of abduction. Abductions are made when a situation presents itself where the viewer was not present at its cause. Abductions, or general rules concerning causality, are then made as to why this situation occurred. For example, when a broken fence is found in the morning it might be abducted that it was windy in the night-but there are other possibilities, such as vandalism. Through abductions, simple working hypotheses are created, which allow some possibilities surrounding causality (high winds) to remain, whilst rejecting others (stampede of elephants). According to Gell, art-like situations can be discerned as those indexes (the material things or the products of artists) which allow the 'abduction of agency' to occur (Gell 1998, 13). The purpose of showing the power behind Maori meeting houses (1998, 258), and other ethnographic examples, is to establish a real link between all parts of Gell's system of indexes (objects themselves) and prototypes (primary agents). Agency's relationship to art is geared towards showing the ways in which people's minds are altered by art. Since abduction is, first and foremost, a cognitive or intellectual process, the agency that art-objects have is derived from its effect upon the mind. Abductions are the significance that is given to art-objects, since, within them, are the enmeshed agency of other agents that is given to art-objects; be it of real or supernatural prototypes. However, it is important to note that many abductions are not as free as Gell often makes out- since there are usually preconditioned by prior knowledge. A lack of (native) elephants on The Wirral negated the possibility that they were responsible for the broken garden fence.

The final and most important issue, in moving away from linguistics, is agency. Gell's definition of agency is those things, people or wills that indicate a causal sequence, and is the will or action of an agent (1998, 16). Art, or 'art-like situations'- from this perspective- are not, and cannot act as agents themselves, but are a continuation of the maker's agency. They (indexes) are not self sufficient, in that they do not cause a response in themselves, but act as secondary agents by being enmeshed, or submerged, in social actions. It is suggested, here, that art-objects can be seen as discourses, with agency as the power that runs through them. Moreover, it is important to know what agency is not; it is not about intentions or causality; for Gell there are no first causes. Thus, this extreme position asserts that all action has no cause beyond causing more action- to do something for the sake of doing it, i.e. power for the sake of power. Being an agent, then, is about having free will (to a certain extent), where a person can take more than one course of action and can make a difference in the world. Agency is not deterministic, or at least one cannot be constrained by it, since according to Giddens 'each of the various forms of constraint simultaneously enables someone else to exercise agency' (Giddens 1984, 173).

As the art-object does not have its own agency, it is simply a means of expressing the agency of others. The agency centred theory of art is geared towards the cognitive effects that art has on recipients. From the mind (and hands) of the artist to the person who views or experiences the art, there exists a situation in which the initiator and the recipient never physically come into contact. The art-objects then become a nexus or discourse through which the agency of the maker is mediated. Gell goes on to describe four types of agency that objects exert: psychological, physical, aesthetic and semiotic (Gell 1998, 66). Gell downgrades the last two not because they are unimportant, but simply because in western academic discourse, they have been covered ad nauseam. The agency of art is concerned mostly with the psychological impact the art has. This is the basic premise of Gell's theory, namely: how do icons and indexes have

agency as tools for the interaction between the state of mind of the artist and those of the recipients? This final issue will be addressed in the final part of this chapter, where the production and exchanges of stone axes and slate knives to rock-art and to the natural world will be linked.

8.3 Rock-art as icons and stone tools as indexes

The previous sections outlined some of the key features of Gell's agency centred approach. This main issue is that, although the system may seem complex, at all points the role and function of agency should be apparent. Before beginning to link Gell's ideas into this specific research, it is necessary to summarise the main issues and how they are related to agency. Firstly, there are prototypes; what the art-objects are making reference back to. This may be the artist or a famous/divine figure that the artist, through his or her skill, is attempting to channel into a finished piece. The next stage is an icon that seems to act as a link or is used to add power and agency to an art-object. Finally, indexes are formalised agency that brings together the agency, not only of the artist, but of the prototypes and any icons as well. Indexes as art-objects may be thought of as nodes of agency that are a method for understanding the flows of agency that are behind an art performance.

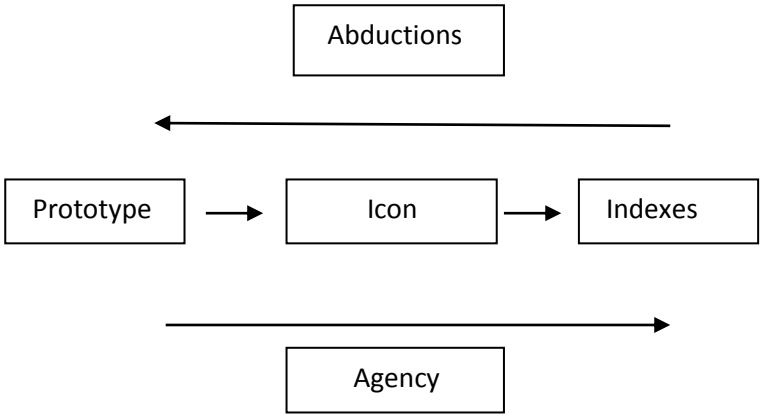

Figure 8.6 The coming together or nodes of the various aspects of an art 'performance' (Gell 1998, 13).

In Neolithic Cumbria and Jämtland, rock-art seems to have acted as a link between the natural world of rock, stone and slate- and the socially created indexes that were a formalisation of the various levels of social interaction and performances. Rock-art seems to have had not only the purpose of linking the social world to the natural, but it also acted as icons of the things that the people who created them wished to emphasise about the natural world. In effect, the stone art-objects channelled power and agencies from the prototypes in the geological world, in the case of Cumbria or the animal world in Jämtland, into the social world of stone/slate exchange.

Agency and power were channelled from their natural sources into the indexes. The stone axes of Cumbria are indexes or objectifications of agency- mediated through the iconicity of rock-art. The same also applies in Jämtland, and the whole of Northern Fennoscandia, where Neolithic stone tools, stone knives and other objects can be depicted with elk heads. Here, art-objects acted as indexes to 'hold' (through abduction) the prototypes (and its power) upon which they are based (Gell 1998, 27). Rock-art is not an index or an art-object in itself, to use Gell's terminology, but an icon linking indexes to prototypes, as a means of channelling Neolithic people's (and archaeologist's) abductions concerning the indexes ultimate agency.

In order to understand his argument better, the processes of the production of indexes needs to be outlined. This will also help to explain why the rock-art styles of Cumbria and Jämtland differ-since they are based on different prototypes to begin with. Firstly, in Cumbria, it is suggested that the primary prototype is the stone of the Central Fells. This represents a source of power and authority during the Neolithic. The indexes are the stone-axe that were moved and exchanged as an art-object or indexes of the prototypes' agency. However, the original agent is the stone and not the 'artist' who quarried and polished them. The artist is simply an intermediary between the prototype (the stone and the mountain) and the indexes (stone-axes). This is a key issue, since the artists in non-Western societies often do not create art-objects but often channel the power of the prototype (often a God's or ancestor's power) into an object

and, thus, it is because of this power that the artist has the technological expertise to 'enchant' the object.

As has already been shown, the rock-art of the Central Fells was found on natural 'living' rock, which differs from that of Eastern Cumbria. It is argued that this is because the two styles are drawing on different prototypes. In the Central Fells, it is often difficult to separate natural shapes and designs from those made by people. The prototype of this rock-art is the natural rock itself and, more importantly, the glacial lines and natural cup marks that are 'motifs' of the processes behind the power of nature's agency. The rock-art is an iconic representation of a prototype situated in the power of the natural world. In Eastern Cumbria, the prototype for this iconic representation is the stone axe rough outs. It was noted by Bradley and Edmonds (1993), that the act of polishing stone is often to bring out natural features and patterns in the rock itself-since polishing to the extent of which was undertaken, in the Neolithic, serves little practical value. It is suggested that agency is the link that unites the polishing of stone, ritual monuments in Cumbria, and the rock-art. The polishing of stone and the emphasis on the abstract shapes and designs in the stone axes is also, analogously, happening to the monuments by placing abstract designs upon them in Eastern Cumbria. In a sense, the making of rock-art is a means of enchantment.

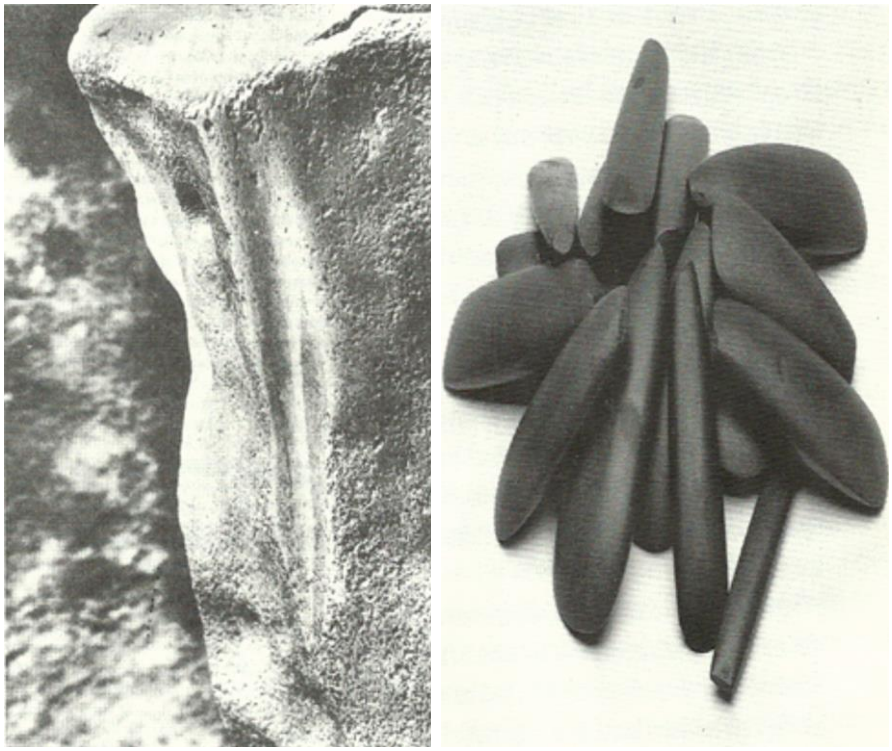

Figure 8.7 Polishing of the stone axe was part of its art enchantment. Polishing grooves at West Kennet long barrow (left) and stone-axe hoard from Ireland (Bradley & Edmonds 1993, Figure. 8.2 and 3.1).

Moving to Jämtland, a different iconography- based on animal forms- existed because the original prototypes (and the power and agency from which they were drawn) differed from those of Cumbria. The rock-art of this region is a reflection of the elk- and other animal based prototypes- with the stone tools or flint knives acting as indexes. The elk heads that were commonly circulated around the sub arctic region (Clark 1968, 21) were the ultimate expression of power and status in Northern Scandinavia at this time-to link the power of the elk to the power of the stone. In Neolithic Britain, the stone axes had the same role, except that, instead of elk heads giving the axes extra power, the polishing of the stone to bring out the natural geometric features of the rock served the same purpose.

Thus, rock-art in Jämtland is not an art-object itself, but simply an intermediary between prototypes and indexes. In Jämtland and other northern rock-art areas, the rock-art is fulfilling a role in the production of slate tools of the local hunter groups- by linking the natural world

with the social world of slate exchange. Possibly the rock-art may have acted also as an icon for the products that the animals motifs would have produced, such as skins, furs and bones for exchange with southern Neolithic groups. Furthermore, the ideological construct and power basis of the Slate Culture in Sweden seems also to have been the elk, along with other animals of the north-since the art-objects or indexes of these people often were shaped into the same elk figures that were also important to the hunters of the north.

Figure 8.8 Elk heads on staffs from Northern Eurasia, these Lithuanian examples show how the elk was modelled into art-objects from Norway to Siberia by hunter groups. (Kashina, E. and Zhulnikov, A., 2011, Figure 1).

Jämtland differs from Cumbria in the fact that the ultimate source of power and legitimacy, for the people of the Slate Culture, comes from the animal, rather than the geological world. This may explain why art, here, is figurative rather than abstract. On the other hand, Cumbria Neolithic power is grounded in stone and the geological world- and not the animal kingdom. The Slate Culture, whilst making and using slate, places the animal world at a higher level than stone and it is this that makes them different from other Scandinavian, Neolithic groups. Swedish stone axes, during the Neolithic, sometimes had elk heads added as a form of enchantment, whilst the polishing of axes served the purpose of enchantment in Cumbria. Gell said the 'technology of enchantment' was an act by which decorative patterns add a certain mystery and power to objects that 'we can never quite understand the complex relationships they embody' (Gell 1998, 80).

Figure 8.9 Pitted ware culture, although overlapping the TRB is, later in date. The style of axe from this period, with added elk heads draws on the power of the animal world and is a coming possible together of both a 'Neolithic' and 'Mesolithic' worldview. (Retrieved from http://2.bp.blogspot.com/DlnUfydAq7g/UD_IAxzsGXI/AAAAAAAADts/wcLle-wjIfY/s1600/hel3.jpg*. [Accessed 3rd June 2014].*

8.4 Exchange and style

Finally, although style and genre are connected to discourse, the role of style needs to be explored in relation to exchange. It was shown above that, although exchange seems to have driven the creation of rock-art, its external form differs because its ultimate source of power also differed. In Cumbria, the rock-art prototype was stone- in line with the general Neolithic worldview. However, in Jämtland, the prototype comes from the natural world and is, perhaps, more an expression of an earlier Mesolithic worldview, which was recycled and used in a Neolithic setting.

In chapters 5 and 7, the issue of style was linked to the production of discourses and its effects on identity creation. Both regions can be shown to have developed similar stylistic pathways, even though the external form of the art differed. In both Cumbria and Jämtland, art can be seen to conform to a number of styles; naturalistic, stylised and abstract. It is suggested that changes in style are related to conceptions of time, in the minds of the carvers; naturalism is connected to the past, stylised to the present and abstract to the future. This seems to have been a common theme shared by the rock-art of Neolithic Northern Europe. Thus, there is a move from realism to ideological and abstract art as time progressed. The point here is that style, although it is often viewed for its own sake, is, in fact, a tool used by communities to organise their social relationships and their way of doing things correctly. The style of an art tradition is a way that social relations are mapped out and explained through art. Furthermore, style is a tool that manipulates and changes social relations, through structuration. Style is never static, since it generally moves from the realistic to the abstract- depending on the level of ideological manipulation of resources; it is this key point that links it to movement and exchange, in prehistoric Northern Europe.

Rock-art is always a discourse of identity, since like all iconography (such as flags or symbols of nationalism in the modern world) it stands between structure and agency. In one sense, it is a short hand or a means of advertising certain places as being part of a whole system of inter connected power structures. In Cumbria, the style of the Central Fells certainly is connected to the stone quarries-and to the natural stone in general-, drawing on the realism and raw power of the central mountains. It is less abstract and ideologically charged than the rock-art of Eastern Cumbria. Thus, the style and form of the art seem to suggest an internal impetus for the rock-art, since it may have originally been based on natural glacial lines and forms on the rock. In contrast, the eastern style has a more external focus- with connections to Passage Grave abstract designs and those found on Grooved ware (although that is not to say that this style was not also inspired by geological forms). However, it was the manipulation of natural forms into ideological and abstract styles (connected with monuments), which differed from the earlier period. The later rock-art of Eastern Cumbria is making stylistic connections to both the Central Fells and wider Neolithic developments, as, perhaps, a means of legitimising growing Neolithic inequality, centred on the control and distribution of axes. This is important, since a desire can be seen to invert the rock-art from the Central Fells by turning lines into circles-as opposed to circles and cups being arranged into lines. One is a manipulation of the natural, whilst the other is a respect for- and a mimicking of- natural glacial designs and styles. Thus, stylistic changes may be nuanced, or they can also be a total inversion of previous styles;it all depends on the given social setting and requirements.

In Jämtland, the style of the rock-art also seems to have stylistically developed from naturalism, to simplistic and, finally, into abstract styles, like Cumbria. However, unlike in Cumbria, this conception of changing time can often be seen on the same site. Furthermore, the difference in external form, between Cumbria and Jämtland, is the result of differing prototypes upon which they were based. Even so, in Jämtland, the same stylistic development of rock-art- from natural

through to abstract-can be seen. The purpose of this was to create an ideological superstructure, to legitimise growing completion of, and for, resources that could be exchanged.

As a result, the connection of exchange networks to changing rock-art styles was linked to the directionality (and hence movement) of the animal rock-art motifs. When elk are moving they tend to be moving east, and follow the flow of water. However, this is also linked to the movement of objects, out of Jämtland, to be exchanged with TRB cultures that seem to have occurred along the Baltic, and further south. Given that the abstract motifs are small waterborne birds, or proto boat motifs, the ideologisation of abstract art and its connection to exchange, is unsurprising. Furthermore, rock-art in Jämtland-like in Cumbria- was a means of facilitating the movement of art-objects, or indexes, across Scandinavia. In Scandinavia, the art uses the movement and direction of the icons to express its link to the movement, and exchange, of art objects.

In Cumbria, the movement is less conceptualised as a real movement, but as a 'movement' of processing and producing stone axes. This makes sense, since stone cannot move (unlike the animals of Scandinavian rock-art.) Thus the stone axe derived its agency from its polishing. In some sense, the style and stylistic changes of Cumbrian rock-art are more related to the polishing of stone, which is unsurprising given the scale of the axe exchange. By polishing, human agency is directed towards bringing out, and enhancing, certain features in the rock. By contrast, in the rock-art from Scandinavia, the exchange and movement of slate is expressed in a more literal sense, as the movement of animals, people or boats. Thus, the expression of agency, here, is through the animal world rather than the geological one. In Norway and Sweden, agency is being expressed more in a 'Mesolithic' sense than a Neolithic sense, as in Cumbria. Either way, although external forms differ, the basic relationship between rock-art movement and exchange is still being articulated. Rock-art, though varying in external form, is expressing changes that have their ultimate expression in the art-objects or indexes- the

polished stone axe and the slate knife- and which draw their power from the geological and animal world, respectively.

8.5 Summary

In Britain and Sweden during the Neolithic period, there occurred changes, in the nature of exchange, which were expressed in the changing form, style and location of the rock-art found there. Initially, in Cumbria, the form of the art was closely tied to the natural world and often attempted to mimic natural forms in the Central Fells. The style of this rock-art was characterised by its naturalism. The other art type of Eastern Cumbria- located on monuments- shows a changing relationship with the natural and geological world. The art's form seems to have been influenced more by the polishing of stone for axes that seek to highlight the patterns and shapes found within the stone. Thus, the style changes from a rather rough, course and naturalist style of artistic realism, to a more smooth, circular and geometric style that could be seen as more abstract. This style of rock-art is emphasised by its location on ritual and circular monuments. Thus, the rock-art of Cumbria-acting as an icon- seems to have been a reflection of the type and nature of axe production at different times and different places, since the stone axe in Cumbria was the art-object, or index, to which all social action and agency was directed.

In Jämtland, a similar development occurred (at least in terms of changes in style). Again, close to the mountains and the slate quarries of Jämtland, rock-art is more naturalistic and realistic- except, here, the animal (and not the geological world) is its prototype. However, as time progressed, the stone that was moved away south and east, from the mountains and fjords- along the Swedish/Norwegian border- the art styles became more abstract, ambiguous and ideological. Art-objects, like slate knives of the northern hunter's, incorporated elk heads or had elk icons carved into them. Furthermore, Later Neolithic PWC groups continued this ambiguous and abstracting process by combining stone tools and axes with elks, as completed

art-objects that draw their agency and power from the animal world. The general process, over time, was to make the animal world, and its power, an ideological resource.

Finally, art and agency centred approaches show that art is central to the understanding of Neolithic production, movement and exchange of stone. In both Cumbria and Jämtland, stone axes, slate knives and flint acted as art objects and indexes of human agency. The power and 'value' of finished stone/slate art-objects was infused, not only with all of the people's agency who collected, moved and produced the art-object, but- by adding animal icons or shaping animals into the art objects- the makers were drawing on the agency of the natural animal world. In Cumbria the same art-objects, and the power that they contained, had a different source of ultimate power and agency, which came from within the stone itself. Thus, rock-art acted as icons between prototypes situated in between the animal kingdom, or geological world, and the finished stone/slate axes, tools or knives.

CHAPTER NINE

Conclusions

9.0 Introduction

This final chapter will consider some of the ways in which this research can move forwards, by linking the approach outlined here to the current trends towards more advanced recording of rock-art. Secondly, why meaning and a comparison of two regions was undertaken will be explored in the context of expressing wider social process. Thirdly, the three main research agendas of this research; meaning, discourse and agency, will be summarised, and future directions- and how the methodology may be applied into other rock-art regions and periods- will be laid out.

9.1 Integrating social dynamics with archaeological aestheticism

This research has attempted to emphasise the social dynamics of the rock-art's creation in prehistory, whilst, at the same time, critiquing other, more dominant methods, which are argued to have side-lined agendas seeking to understand social theory- in favour of landscape, historicism, objectifying and recording the art- the logical conclusion of which may be termed the post-archaeological narrative- aestheticised and devoid of text. Although he does not state this, as such, Gell (1998) saw any attempt to aestheticise –or, more accurately, 'anaesthetise'- art as a great danger. Moreover, Gell's attempt to socialise art, using agency (in an anthropological sense) was the blueprint for this analysis; although a major difference is that the approach, here, does not take such a dim view of the (dialectical) creation of meaning, nor does it attempt to ignore social inequality as a driving force in social relations.

The most difficult task is, then, connecting advances that are being made in recording- along with the general trend towards an objectification and aestheticisation, with some of the deeper questions concerning Neolithic social practice. Gell (1998, 2-4 and 97) takes the extreme view

that aesthetics is totally opposed to anthropological and social theories of art- since, in his view, aesthetics is simply the means through which reactionary elements attempt to downplay art's social focus, and its role in effacing social relations and conflict. However, the view taken here is not as extreme, since it is felt that the better recording of the art can be a positive development, so long as it is guided into a productive methodology that seeks to explore- rather than downplay- the social role of art in prehistory. Consequently, higher quality representations- using digital laser scanning techniques- can serve to motivate research towards a more complete archaeological theory of art and social relations, in prehistory.

This may seem surprising, as this thesis may appear to have set itself up in opposition to the current trends in archaeological (post) theory and research; but this is not the case. It should be possible to find a common ground between a social archaeology and a technological progress. Technological developments should be embraced, as long as they do not create sanitised prehistoric narratives, devoid of social context. Furthermore, this argument is not only directed towards historicism and landscape/geography. This research has simply attempted to integrate them within a wider prehistoric, sociological framework. Landscape and historical approaches are perhaps closest and easiest to apply into this meaning/discourse/agency methodology, since they can easily be used to help support the development of a social theory of prehistoric art. This is because they can easily answer questions concerned with social processes,-although not social structures.

9.2 Why meaning?

As already stated, the purpose of this research was to give the rock-art of Neolithic Northern Europe a more social context. In order to do this, it was suggested that the issue of meaning might help socialise the art-since meaning is a powerful force in motivating people's actions, within a given social context. However, meaning here has a very specific social significance- grounded in dialectics- rather than meaning a simply subjective musing about what the rock-

art may be. For various historical reasons outlined in chapter 2 (which were developed in chapter 3), the social dimensions (of which meaning and social structure were part), behind the archaeological record, have begun to lose favour in archaeological research. An important reason for this occurrence is that those who have traditionally been interested in social theory have tended to drift away into either subjectivism or agency centred approaches-both of which tend to reject any inherent structure or structural components.

Moreover, there is a deeper reason for using a problematic term such as meaning. Generally speaking, in addressing such questions of meaning, researchers often move away from serious archaeological discourse, towards subjective speculations. It is precisely because of its difficulty and inappropriateness- at an academic and intellectual level- that meaning was chosen- since it challenges current understandings that generally reject meaning in the archaeological record. Like having a car's petrol tank in the front bumper (the effect of which would be to make the driver far more cautious when on the roads), the effect of trying to locate meaning is to take the researcher out of his or her intellectual comfort zone. It is argued that the general rejection of meaning in archaeology, and rock-art, has led to a kind of 'intellectual sloppiness', because researchers no longer feel constrained by having to locate meaning and structure in the archaeological record (a legacy of post-structuralist and post-modernism). The situation, as it stands, is that researchers can either compile masses of pointless data, produce more accurate digital images (which further anaesthetise the art), or, on the other hand, give subjective accounts of how the art makes the researcher feel. All of these approaches are valid, so long as they do not discus the meaning behind the art, and the social systems which produced it.

9.3 Why a comparison?

In chapter one, it was stated that comparing the rock-art of Cumbria and Jämtland has the benefit of highlighting some of the wider similarities that occurred during the Neolithic in the two different, yet similar, areas. The justification for approaching the art from an interregional perspective is emphasised by considering what the research conclusions would have been if only one region was investigated. Firstly, the general trends in style and artistic form, across Northern Europe, would not have been identified. This sees a general trend towards more abstract artistic styles, from earlier traditions that were embedded within two aspects of the natural world; the animal in Jämtland and geological in Cumbria.

A second weakness would have been not exploring the relationship between rock-art and the movement of stone in different, but similar prehistoric, regions. A third weakness, of a mono regional study, is that the communicative character of the art would have been less understood. The rock-art, in both regions, shows a discursive and communicative nature-both in Scandinavia and Britain. This is exemplified by its location along routes into, and out of, the region, and suggests that art was made to be seen by other peoples, or group, besides those who were making the art. In Sweden, the evidence for this is more concrete, since there are two well-defined and distinct groups, during the Neolithic, in central and northern areas. In Cumbria there is less material evidence for different and/or competing groups- however, the location of art along strategic points, into and out of the county, suggests that there may have been numerous, possibly competing groups, involved in the production and exchange of stone axes, during the course of the Neolithic.

A fourth, and final point, is that the research has successfully shown that, with a suitable methodology, it is possible to draw comparison between two very different rock-art repertoires. Since we are attempting to identify various discourse themes- through a discourse analysis-

moving beyond the superficial, some of the more essential themes of social interactions, with the landscape and material culture, could be explored.

9.4 Structure of rock-art

The basic structure of the art in the Central Fells (Chapter 4) consisted of cups or circles that were either arranged into lines, or arranged to form other motifs. Normally, lines were used to create motifs such as common rings around cups, or Passage Grave styles-but, in the central fells, there is a reverse of this situation. Furthermore, lines were carved to mimic the natural glacial scarring of the stone, for the natural lines were simply incorporated into the rock-art. Cups, which are of medium size, were generally found, equally, at both complex and simple sites- and the more complex the site was, the more mixed or intermediate motifs there were. Mixed or intermediate cup are motifs that have cups with either one, two or three lines going in or out. The largest cups are found more at complex sites, whereas simple sites have mainly small and medium cups.

To the east, in the Eden Valley, the basic structure of the art on monuments consisted of the manipulation of lines into rounded motifs and shapes. Half ring motifs were the most common design element, with cups and multiple rings- and spirals- showing similar values at both complicated and simple sites. The curving of lines was the basic feature of this art, which seems to have been a negation (or antithesis) of the rock-art form in central Cumbria. This thesis-antithesis relationship is further emphasised by the Chapel Stile site, which may have acted as a synthesis of rock-art in the county where the style of carving normally found, to the east (and in the west of Ireland), is located in an area of cup and line marking- close to the stone quarries. Therefore to summarise, the basic structure of the art, in the central fells, consisted of cups or circles, arranged into lines, or forming other motifs. Lines were either natural, or created to mimic natural glacial scarring. In the Eden Valley, the basic structure took the form of a manipulation of lines into rounded motifs and shapes, thus negating the rock-art forms of

the central fells (i.e. an anti-thesis). It is interesting that in both central and Eastern Cumbria more complicated sites were associated with more limited motif repertoires.

In chapter 6, the rock-art of Jämtland was shown to be based upon the division and dichotomisation of the main elk motif type, into a number of sub-categories such as stationary vs. moving, male vs. female and east vs. west facing. One of the main findings was that elk images are mostly female in Jämtland, which supports Tilley's (1991) observations at Nämsforsen, in the neighbouring province of Ångermanland. This provided a powerful statement about the possible matriarchal structure of the social groups who created the art. What is significant is the fact that the sexing of elk- and whether they are moving- was more important than the sexing- or movement- of humanity. This suggests that social power was drawn more from the elk than from the social group itself- and also more from the animal kingdom than from the energy created through social interaction. This is in line with most hunting cultures that often place the animal world above their own. Furthermore, the interaction between movement vs. stationary was also a powerful means of expressing structure at the rock-art sites. Stationary is defined, here, as representations wherein the legs of the elk are straight. The number of stationary, female elk was 18 (with 4 male). By contrast, 33 female elk are moving (with only 18 male). Another major structural feature, connected to movement, is directionality. At rock-art sites in Jämtland, elk that are stationary often face west, whilst those that are moving tend to be moving eastwards. Naturally, there are exceptions to this rule. This, perhaps, suggests the possibility that the art was linked to the flow of water and the flow of slate from the mountains in the west in Norway, towards the east and the Baltic Sea. Finally in Jämtland, the basic form of the elk was supported by two other motif types; humans and small, indeterminate animal motifs. Although these motifs lack the variety of the elk, they are no less significant, and could be argued to act as 'supporting actors' for the main, lead role that the elk played. The lifeless and simplistic painting and carving of humanity - along with the ambiguity

of small mammals - contrasts well with the size, naturalism, and general dominance of the elk as a social totem.

9.5 Discourse themes

In chapters 5 and 7, a discourse analysis attempted to create a link between structure and agency- and the issues surrounding communication and style. Furthermore, the understanding of its discourse is the first step towards socialising the rock-art. In Cumbria, the three styles of carving created a discourse between the rock-art sites of the Central Fells, and Eastern Cumbria. In central Cumbria, the style of carving is centred on a naturalistic- or realistic- rock-art style, or discourse theme. It is suggested that, initially, the natural markings and designs of the rock-both lines and cups- were regarded as a kind of 'rock-art' itself. In Jämtland, the same naturalistic and realistic discourse themes can be found. However, the form of the art differs, in that it uses naturalistic-or more realistic- representations of elk motifs, to connect it to the natural world. Either way, they both seem to be drawing upon the power and energy of the natural world to create social cohesion, which is reflected in the rock-art motifs and the discourse themes that they create.

The next, and second, discourse theme can be called stylistic or stylised. In Cumbria, the initial, and earlier, rock-art is a stylisation and depiction of natural glacial and weathering forms. The carver/s were simply reproducing- or mimicking- the natural, in a very simplistic sense. In Jämtland, this same discourse is expressed in the carving or painting of humans, in a stylised way. Unlike the elk, which shows a higher degree of naturalism, realism and size, humanity was often depicted in a very simplistic and small way. The third, and final, major discourse theme is that of abstractness, where the motifs were painted and carved to emphasise a movement away from realism- towards more abstract and ideological forms. In Cumbria, it could be argued that natural glacial lines were manipulated and altered to create a style of rock-art that is more abstract. Thus, there is a possibility that the abstract Passage Grave style may

have had its origins in the manipulation of glacial scarring on stone- but, over time, the realism and naturalism was superseded by a greater desire to create abstract forms. This process seems to have continued into the Bronze and Iron Age, as artistic expressions may, perhaps, be argued to have continued in this abstract way. In Jämtland, the figurative motifs remained, but their style changed from realistic and naturalistic to more the abstract representations of figurative designs, and again, this process, which had its origins in the Neolithic, can be seen to fully develop in the more abstract, figurative form and styles of later Bronze and Iron Age rock-art- exemplified in Southern Scandinavia.

9.6 Rock-art and agency

The final level of the model deals with agency, and how it was related, on the one hand, to the structure and form of the art, whilst, on the other, to the stylistic discourses of their narratives. Building on Gell (1998), there are three aspects related to art and its agency: prototypes, icons and indexes. Firstly, since the prototypes of the rock-art in Cumbria and Jämtland differ then, naturally, their external form will also differ- despite fulfilling the same social role. In Cumbria, the art draws its original power from the geological shapes and natural 'rock-art' of the stone, whilst in Jämtland, the original prototypes lay in the animal kingdom, and especially with the elk. At the opposite end, the indexes- or art-objects- in both regions were the final greenstone axes, in Cumbria, and the slate knives and tools in Northern and Central Scandinavia. Rock-art, then, acted like icons that linked the prototypes to the art-objects. In the case of Cumbria rock-art, style and form linked the finished stone axes to the mountains, and the natural geometric forms found on the stone there. Furthermore, the polishing of the stone helped to bring out those same geometric designs within the stone and, thus, further enhanced the power of the art-object. In a similar sense, the rock-art in the landscape acted as an icon- carved or 'drawn' on to the rock, to highlight and emphasise the power within.

In Jämtland, there occurred a similar process. The art-object was the slate knives that were linked to their prototypes in the animal kingdom- through the rock-art motifs of those animals. The fact that slate knives were often carved with elk heads- or carved with elk, or other animal motifs on them-reinforces this point. The contemporary, and later PWC, which exhibits more hunter-gather aspects- whilst still producing polished Neolithic stone axes- incorporated elk into their completed stone axes. This was a powerful statement of combining the prototypes with art-objects in Neolithic Scandinavia, as the polished stone axes contained the collective agency of all the social networks- both from hunter-gather as well as Neolithic TRB and PWC groups involved in the collection, processing and exchange of stone. Thus, at all levels, and in both Britain and Scandinavia, we can see beyond the iconic representation of the art, and begin to see that the choice of the art styles is a reflection of the much wider social systems that allowed them to exist.

9.7 Future directions

The aim of this thesis was to address what was perceived as a number of imbalances, not only in rock-art research but also in wider archaeology. The major criticism/observation was that, in rock-art research, not enough time is spent actually looking at the art. This may seem strange since rock-art is, first and foremost, visual. However, one of key features of aesthetics- and the visual- is that art becomes a means of transcending reality, and this leads one to become lost in a sensual response to the art. This thesis has attempted to do the exact opposite by focusing on structure and meaning. These two concepts draw our attention not only back into the art, but also back to the social reality from which it came. The strength of this research methodology is that it can be applied to other areas of prehistoric archaeology. However, it is necessary to widen our understanding of what can be 'translated' into text and why this should be done. The power of textualising (which has been emphasised throughout this research) lies not so much in its ability to socialise knowledge, but in its function as a safeguard to the tendencies of

abstracting, visualising and aestheticising archaeological understandings. Textualising is offered as an alternative to aesthetic archaeology; the former seeking to elevate the social, whilst the latter seeks to efface social conflict, in prehistory.

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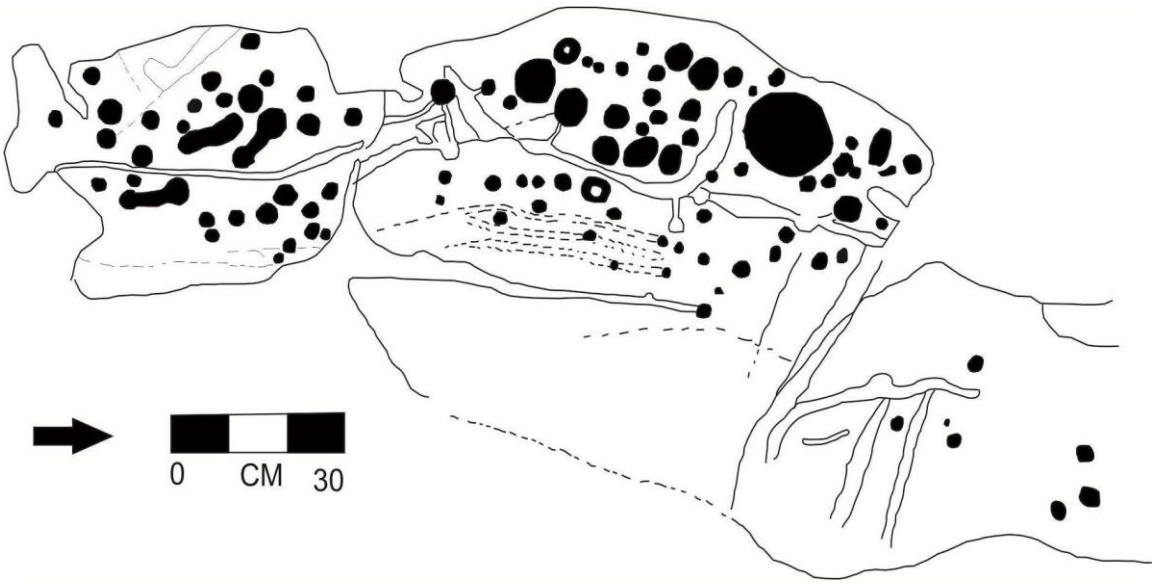
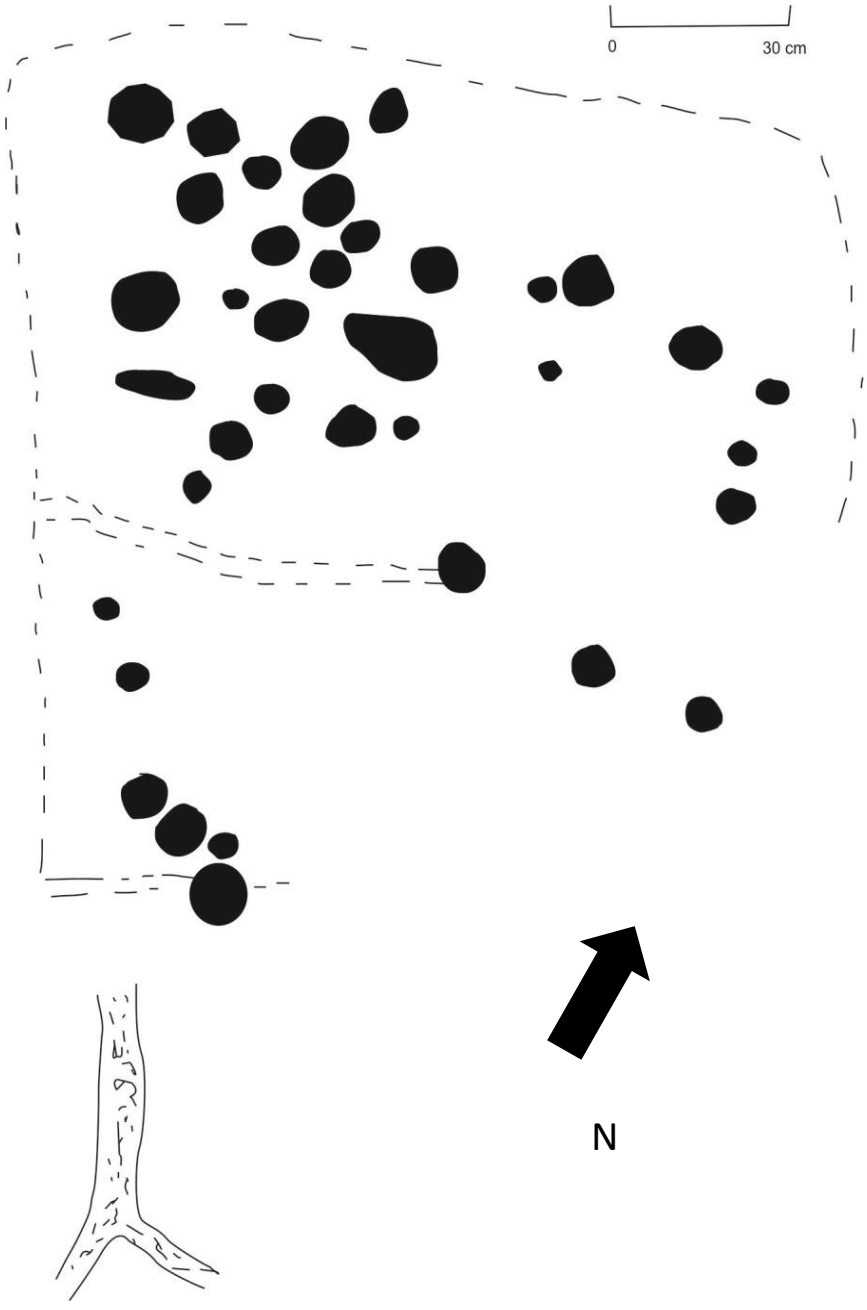
APPENDICES

Cumbria Rock-Art Images

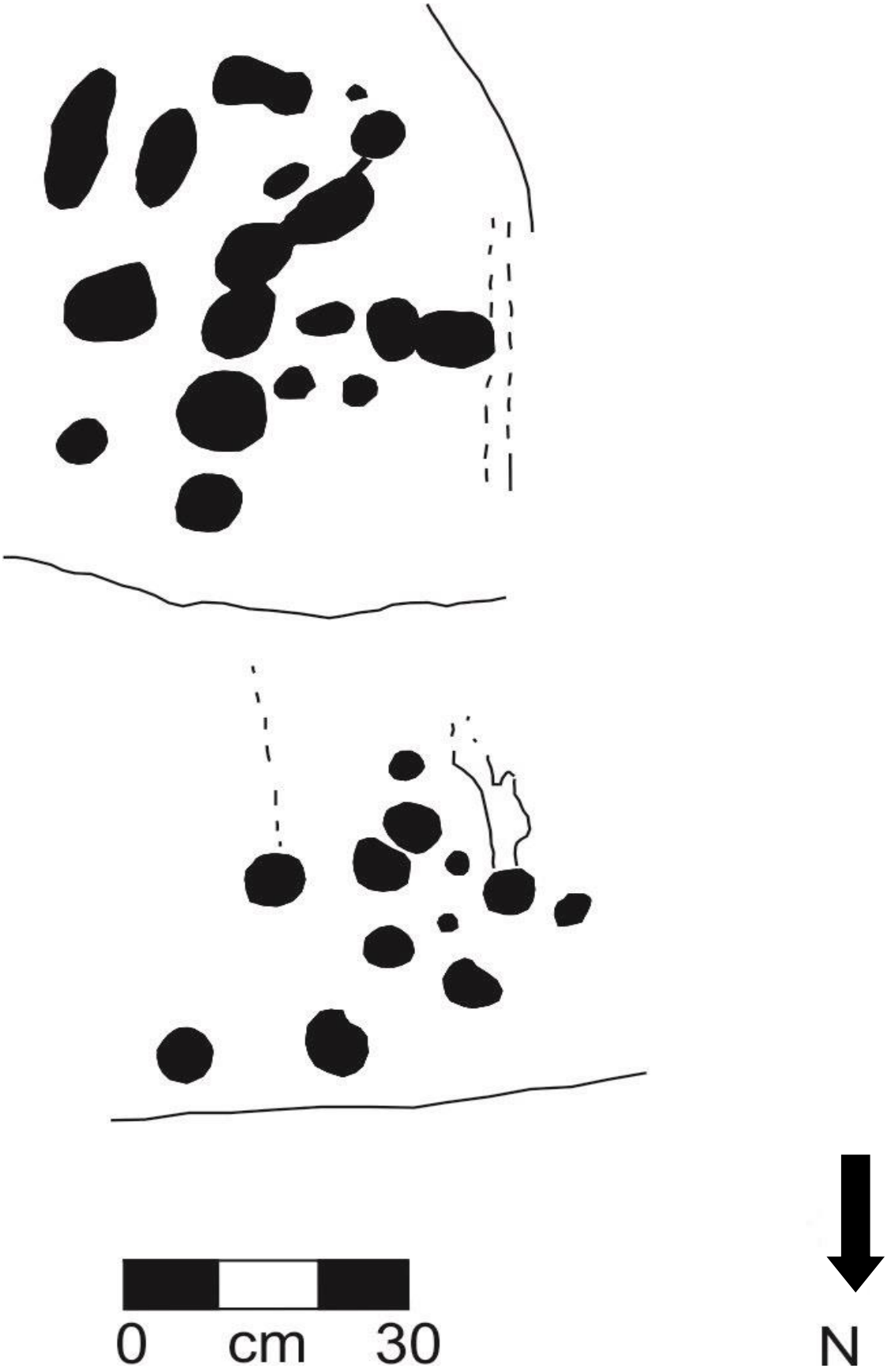


Appendix 1. Patterdale 1.

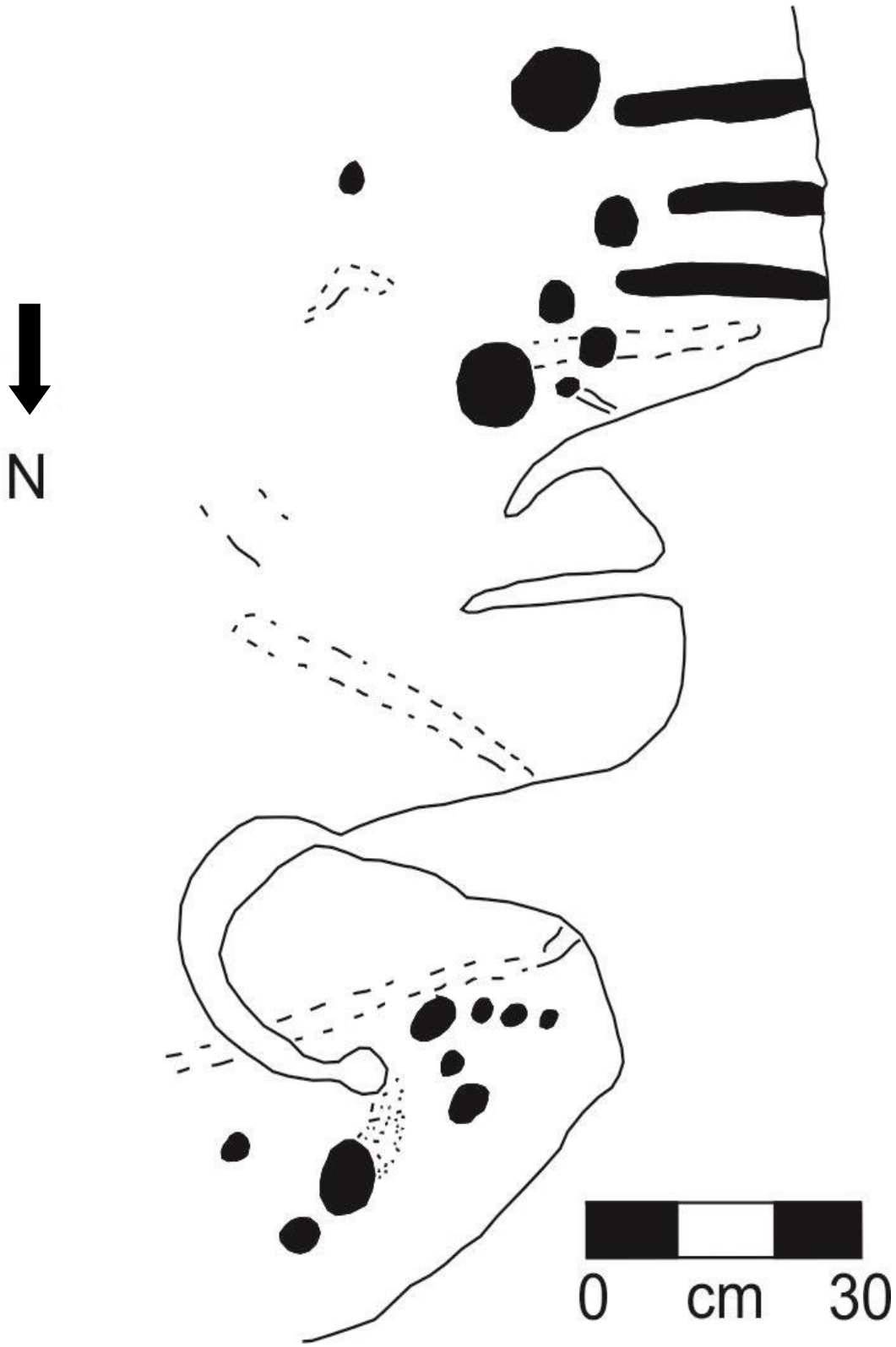
Appendix 2. Patterdale 2.



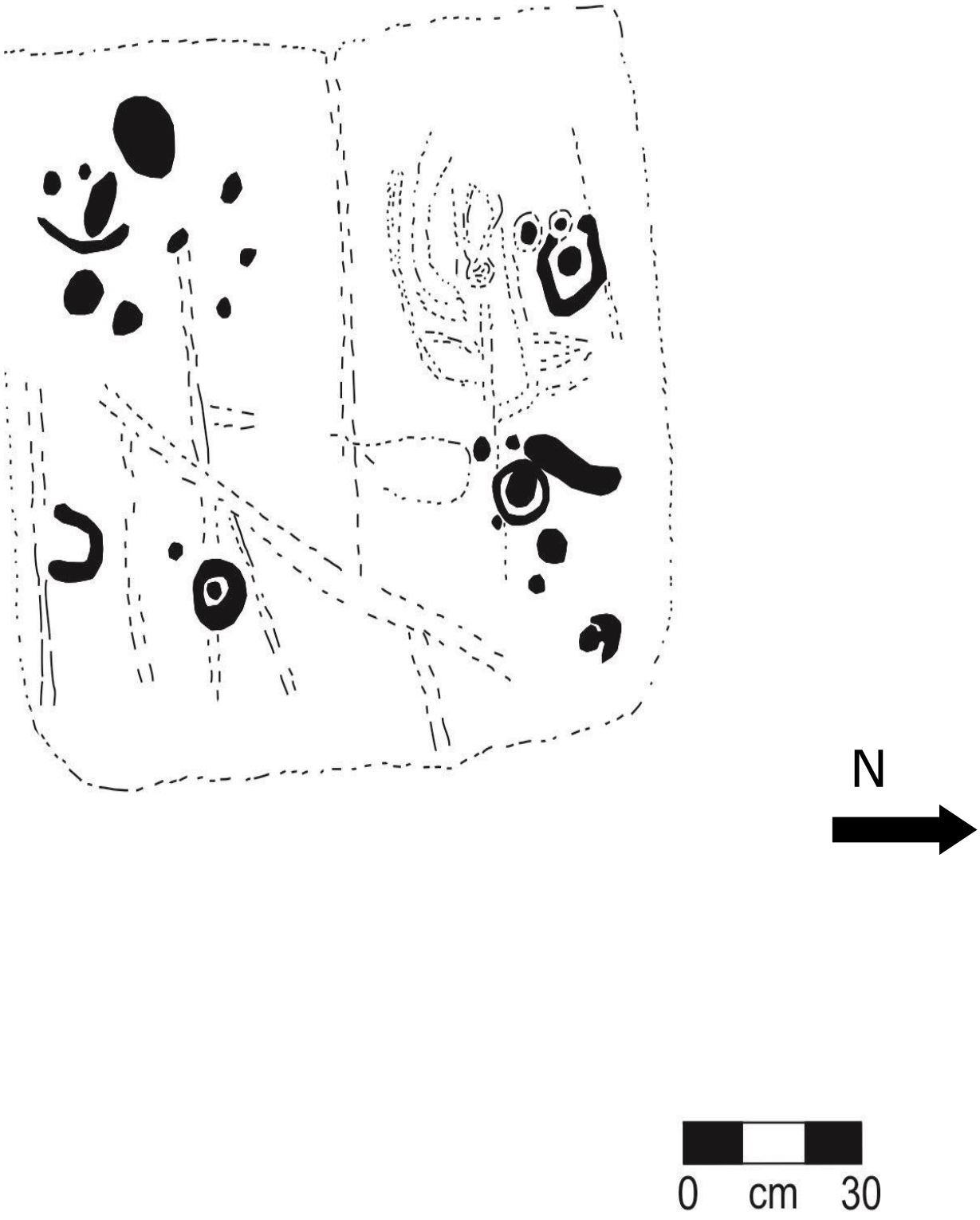
Appendix 3. Beckstones.



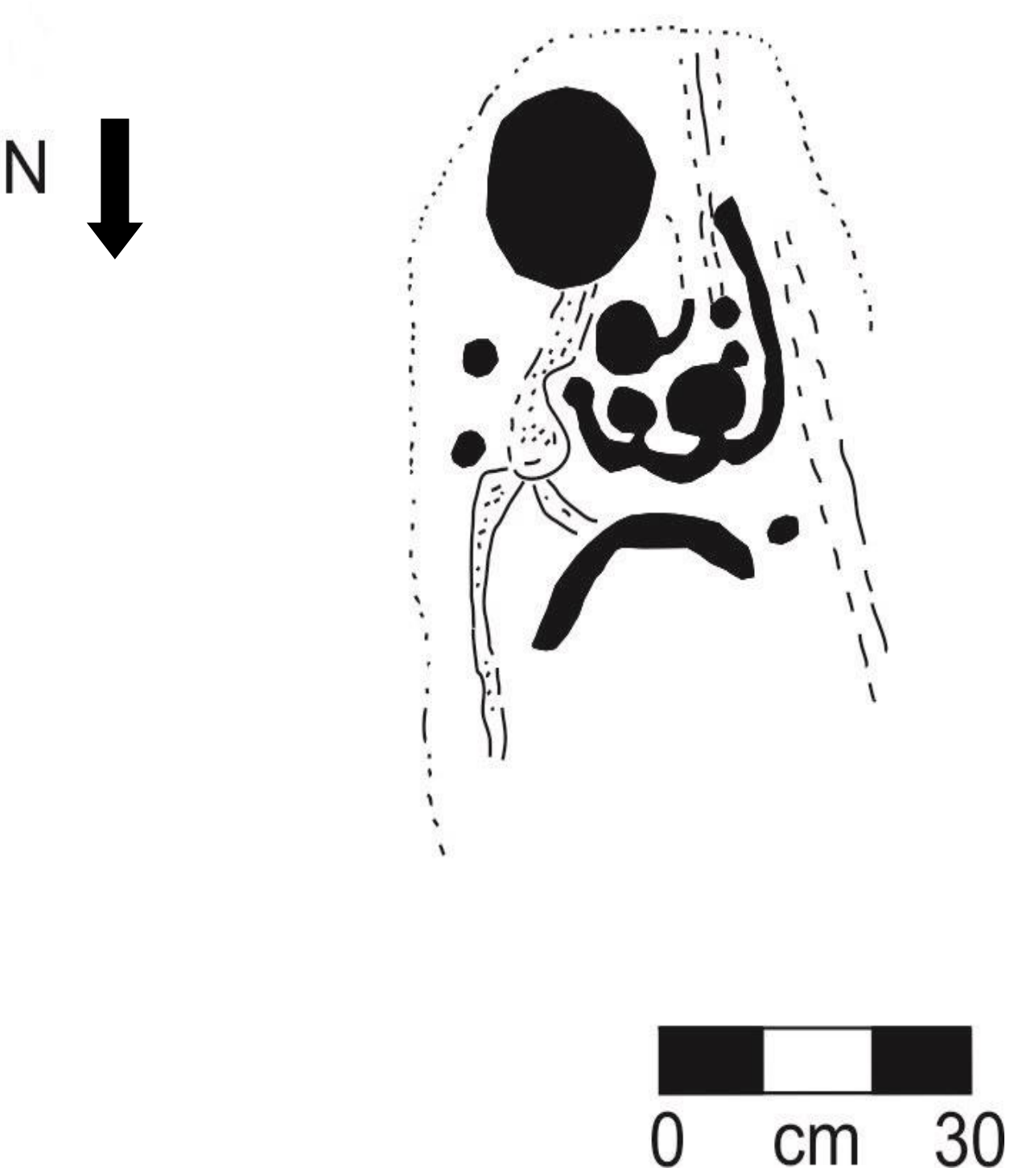
Appendix 4. Patterdale 3.



Appendix 5. Patterdale 3.



Appendix 6. Patterdale 3.

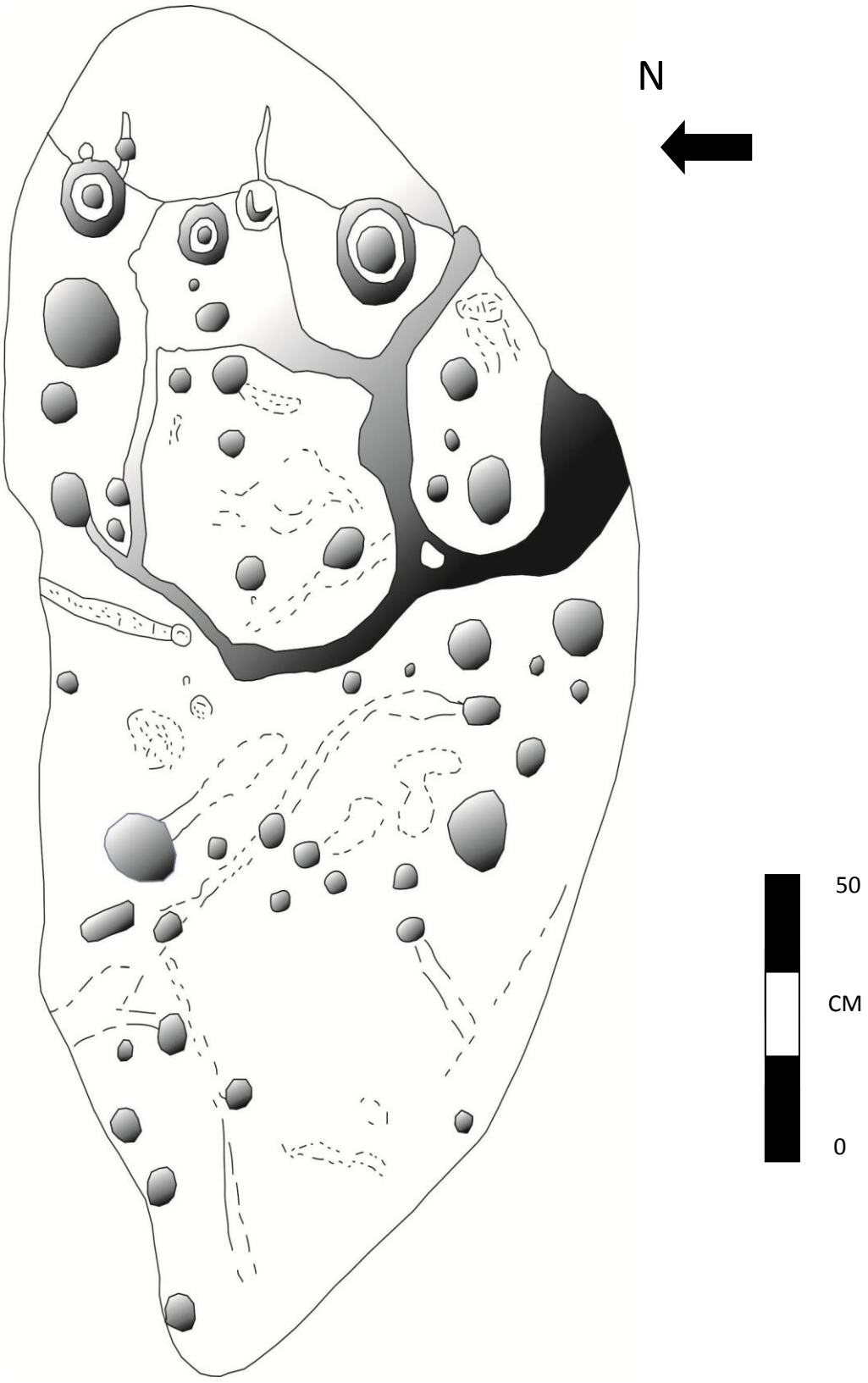


Appendix 7. Patterdale 3.

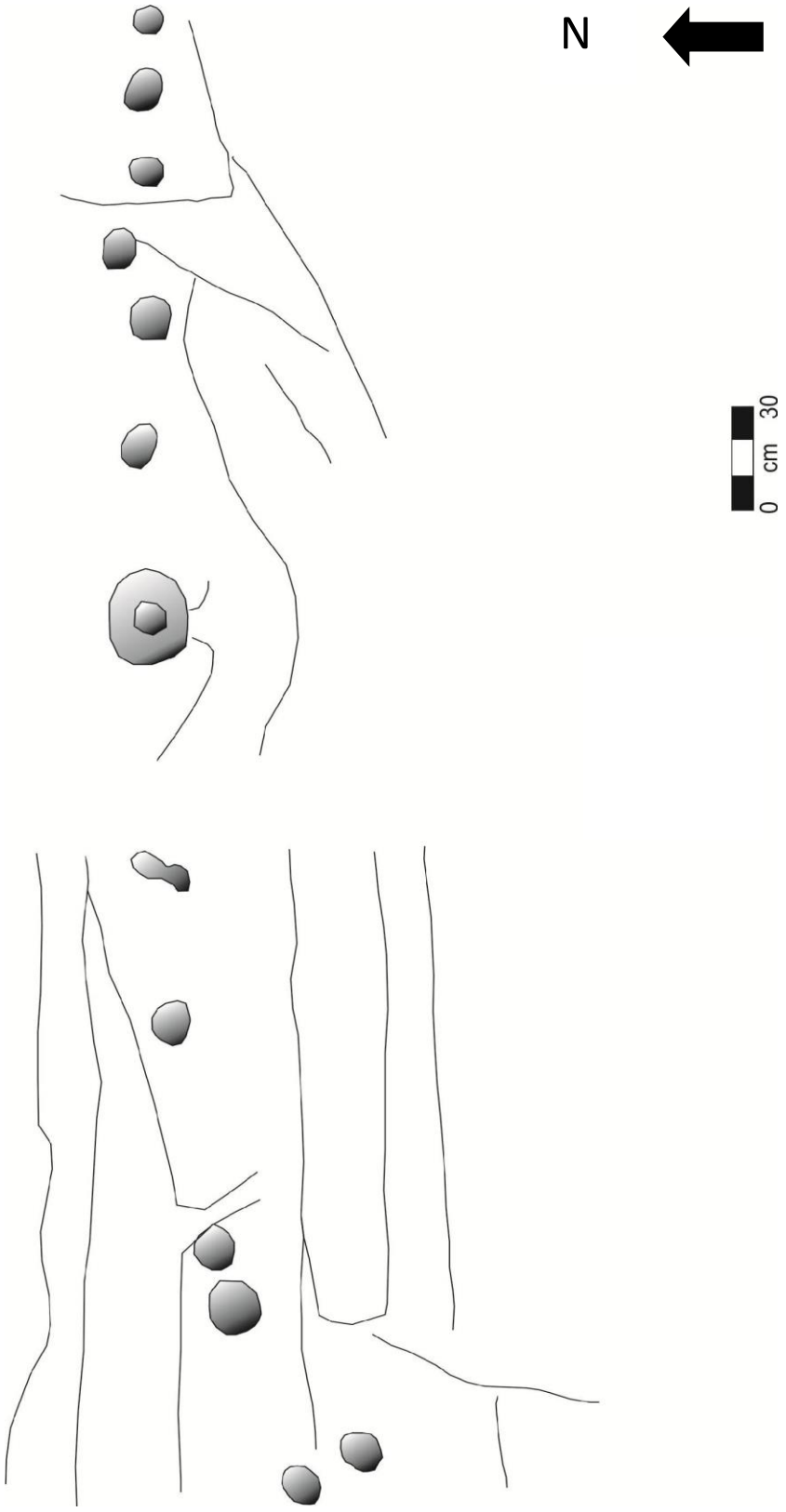
Appendix 8. Patterdale 3 West.

Appendix 9. Chapel Stile.

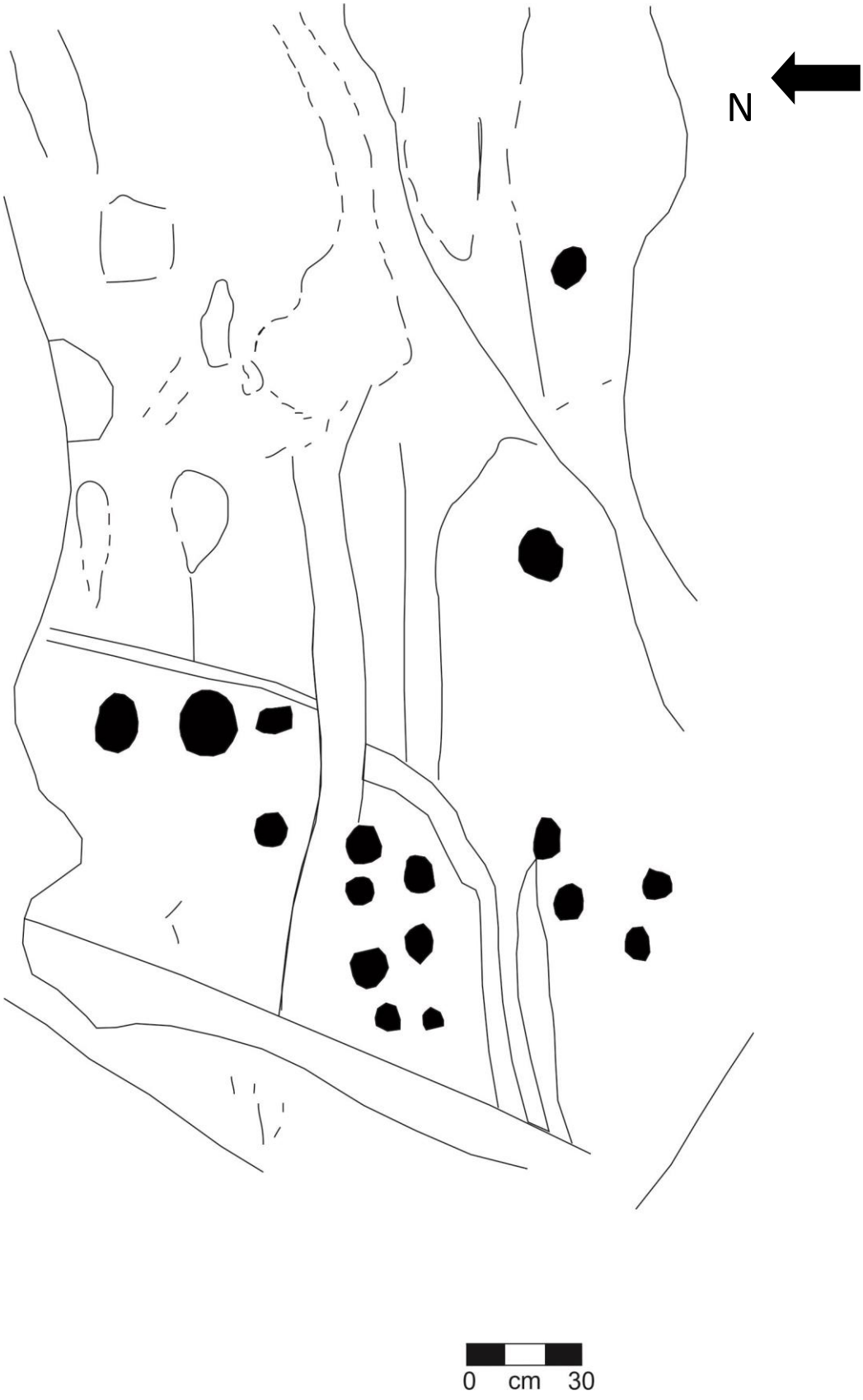
Appendix 10. Long Meg.



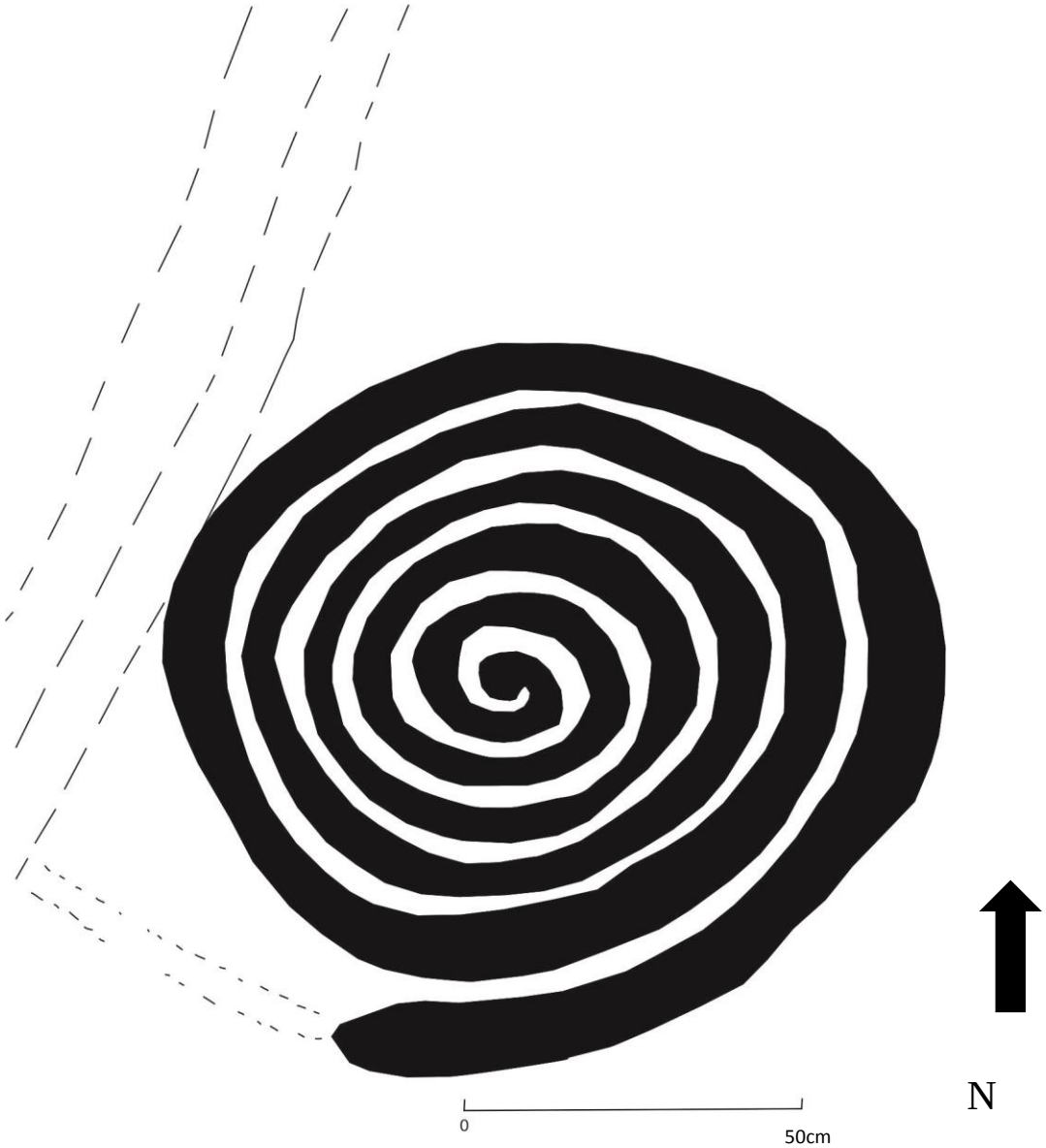
Appendix 11. Tortie 1.



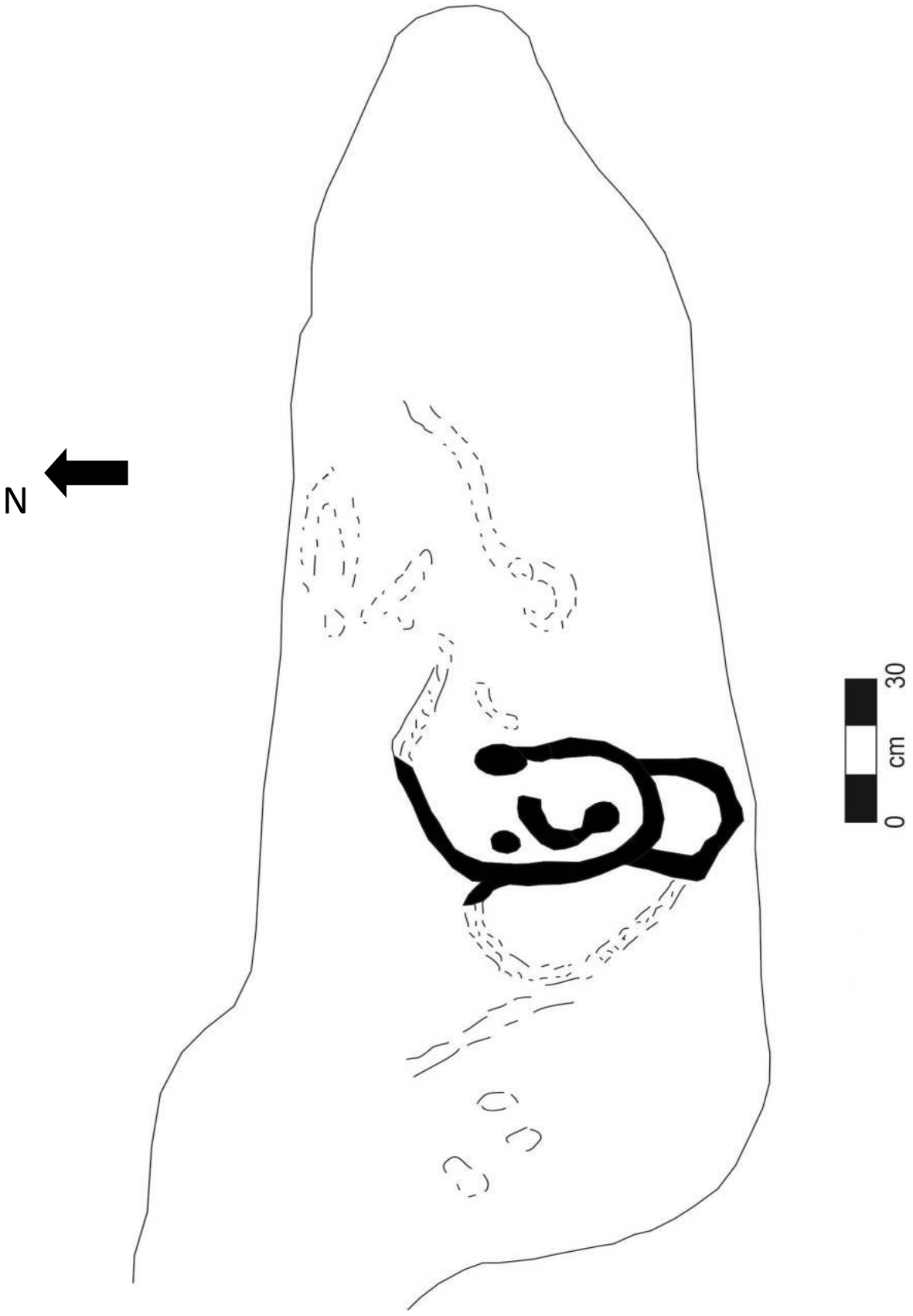
Appendix 12. Tortie c and d.



Appendix 13. Tortie b.

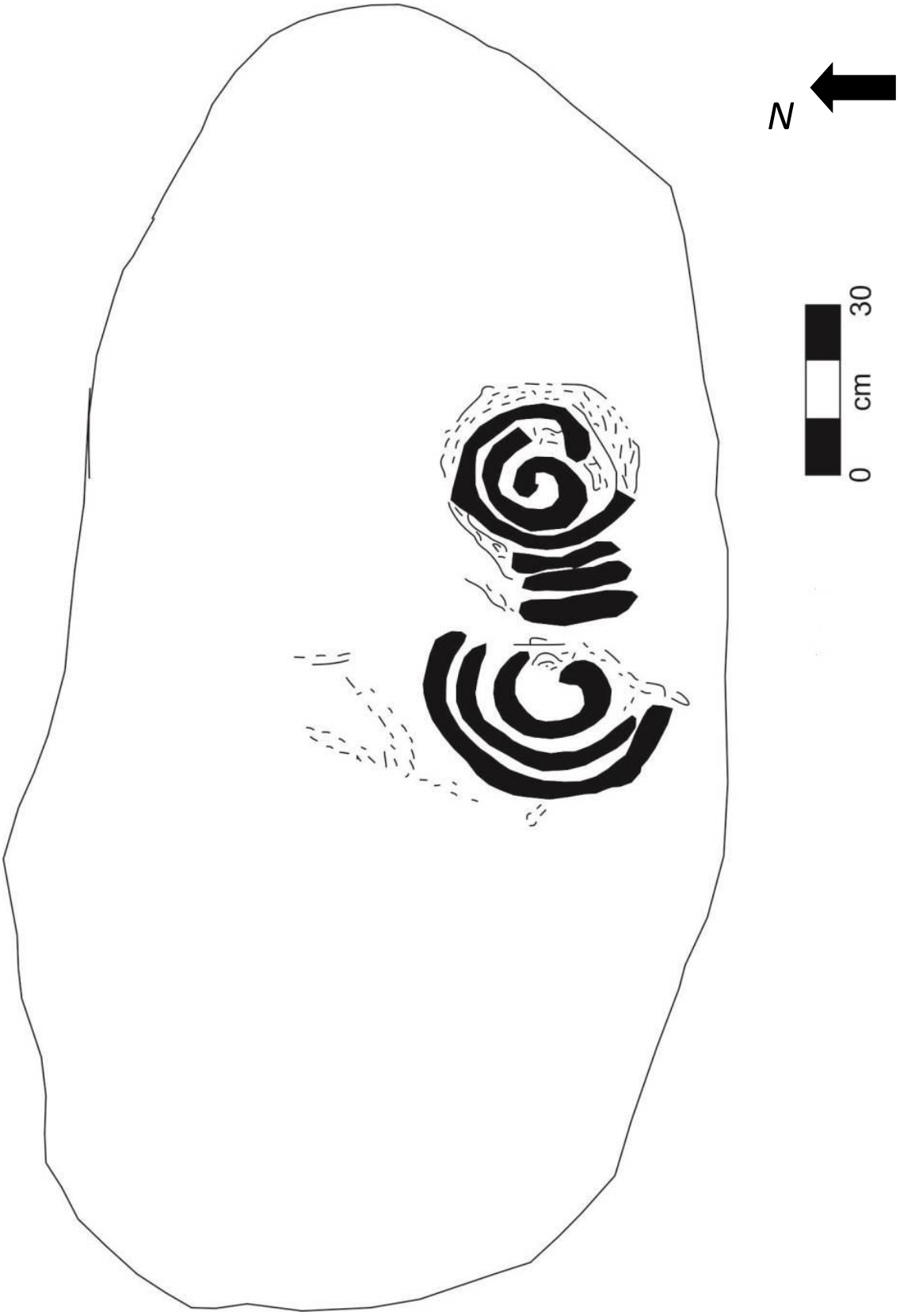


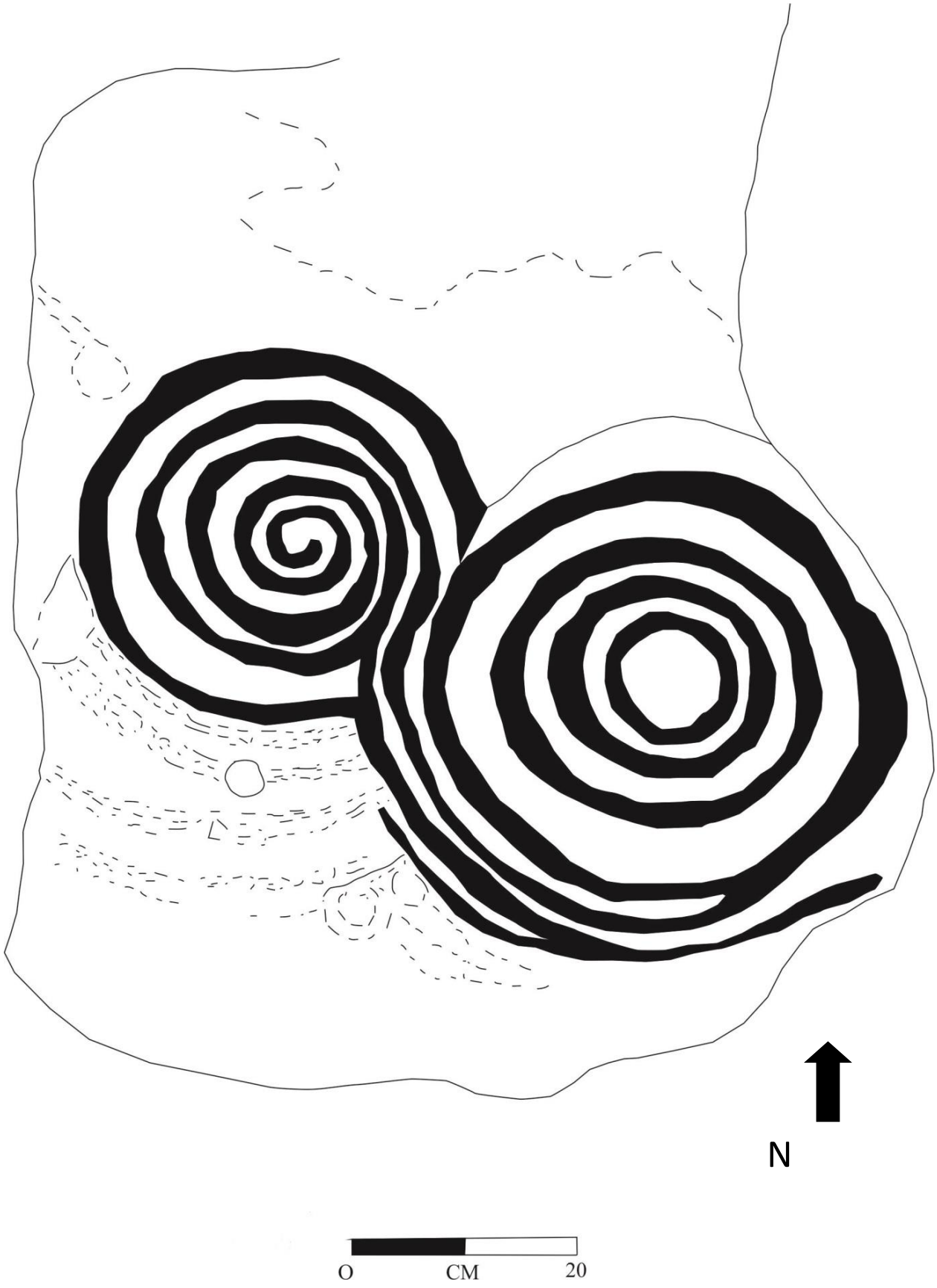
Appendix 14. Castlerigg.



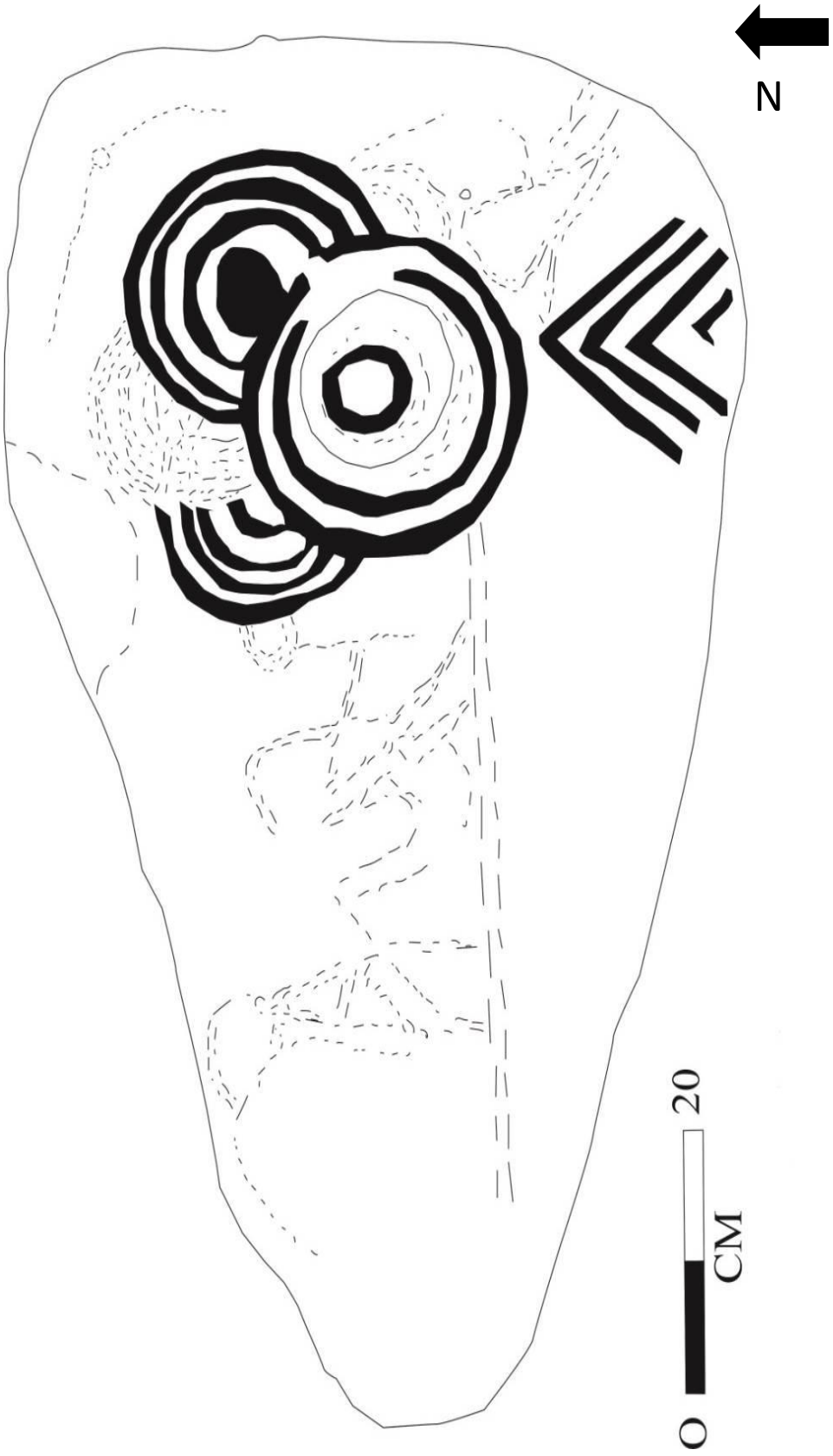
Appendix 15. Long Meg fallen stone 5.

Appendix 16. Long Meg fallen stone 7.

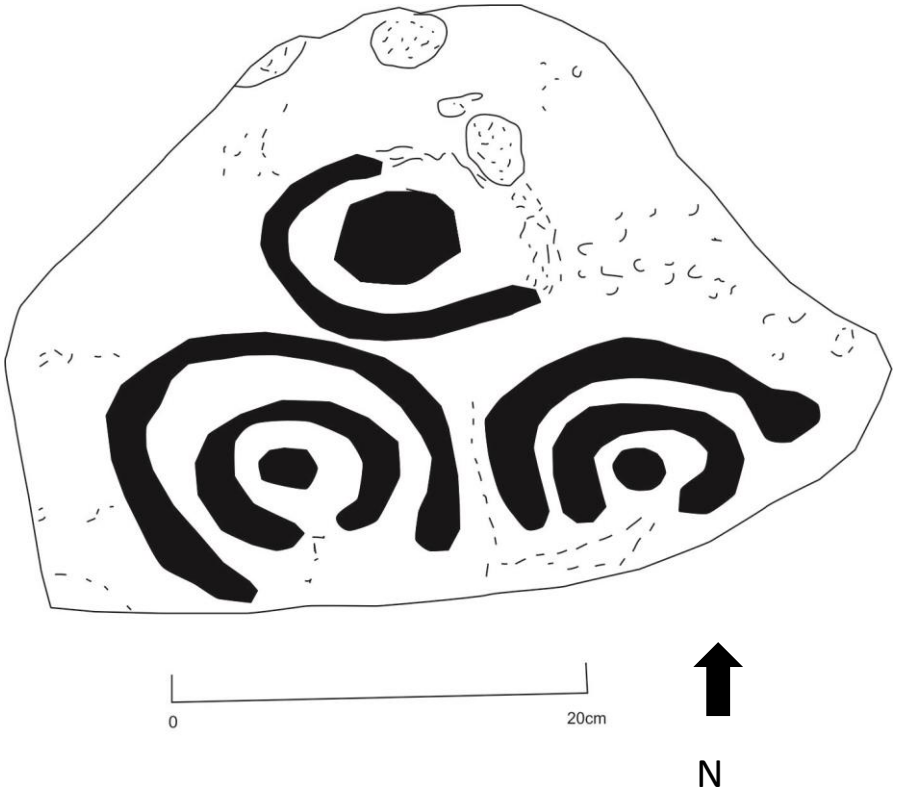




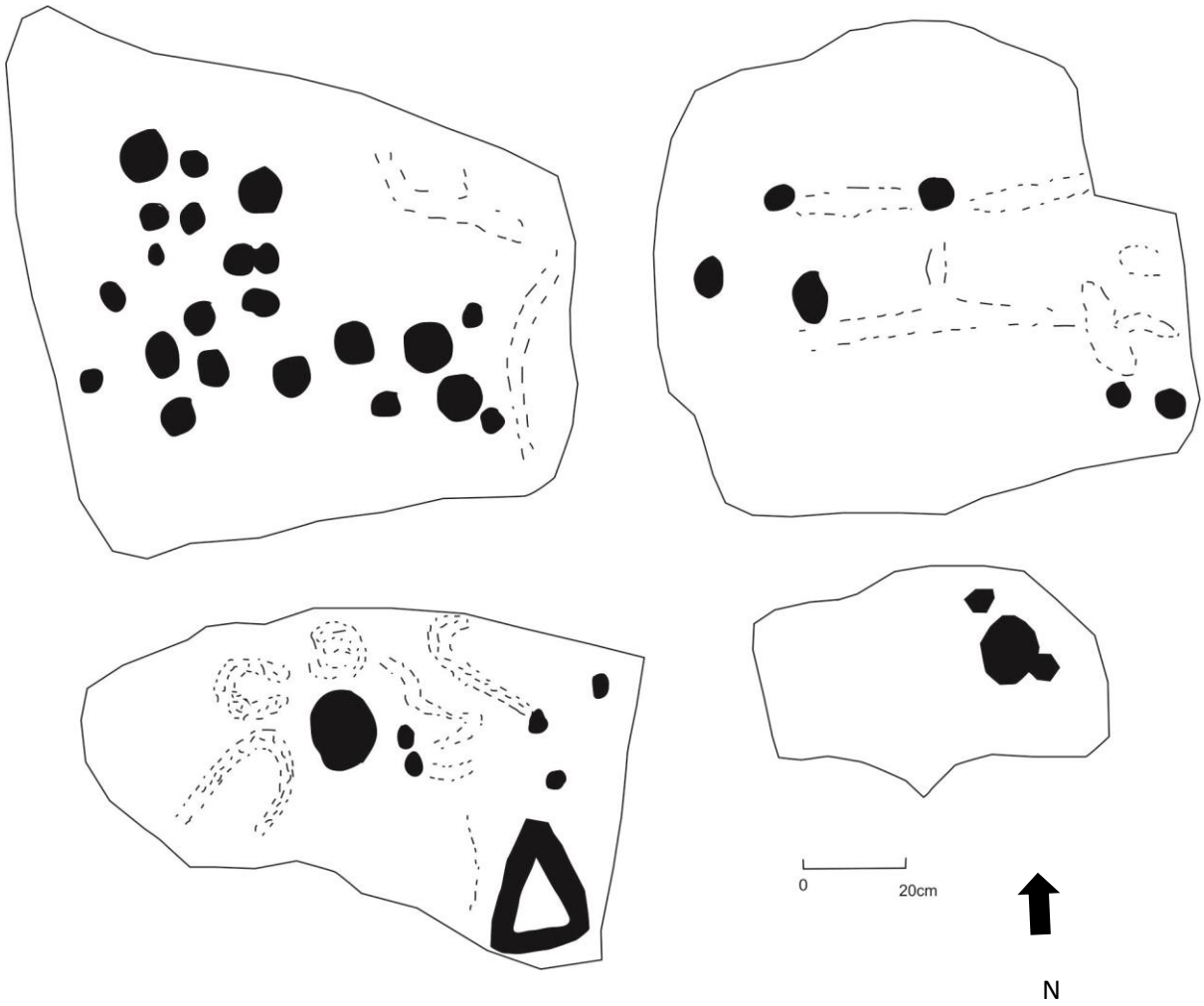
Appendix 17. Little Meg.



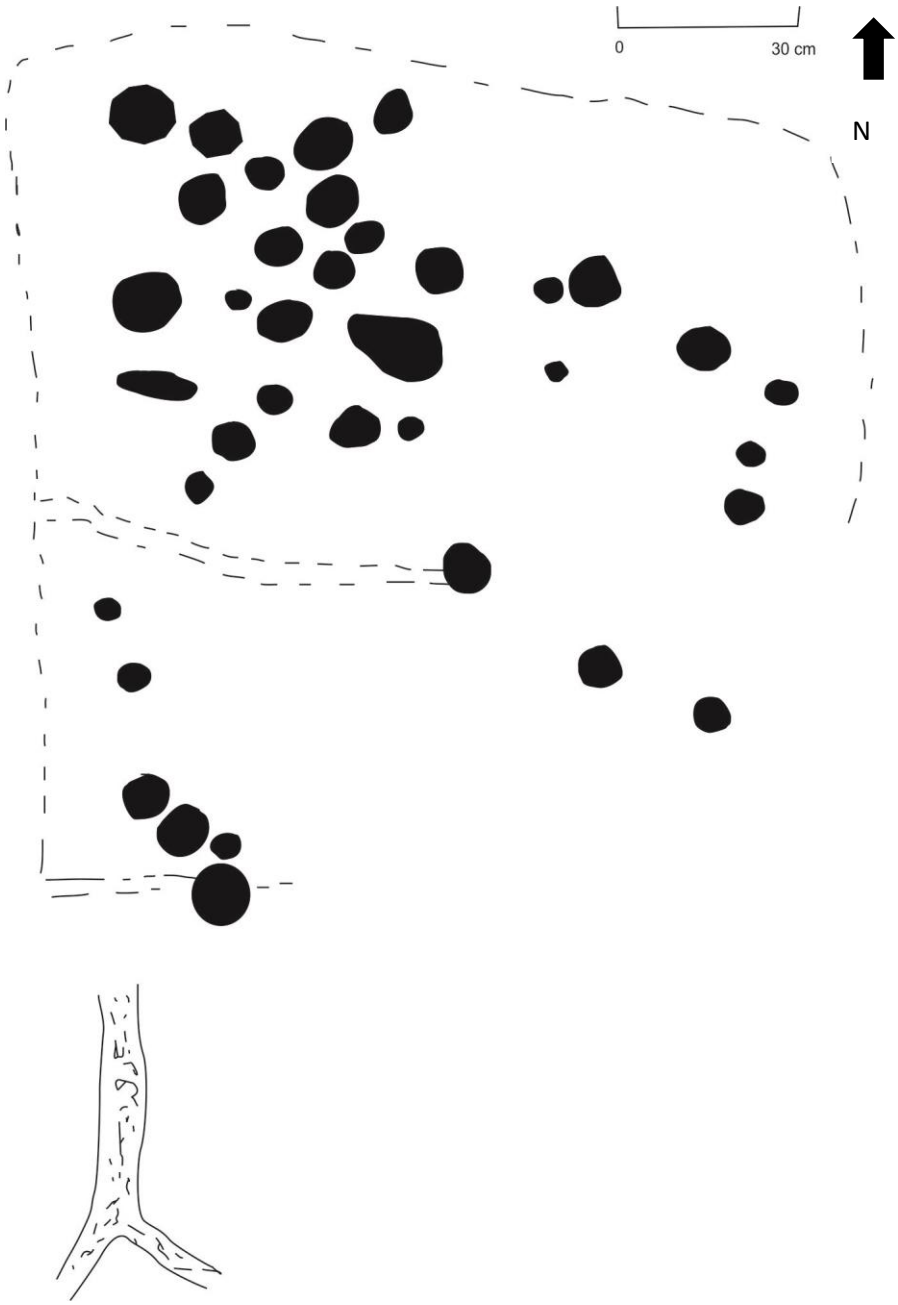
Appendix 18. Glassonby.



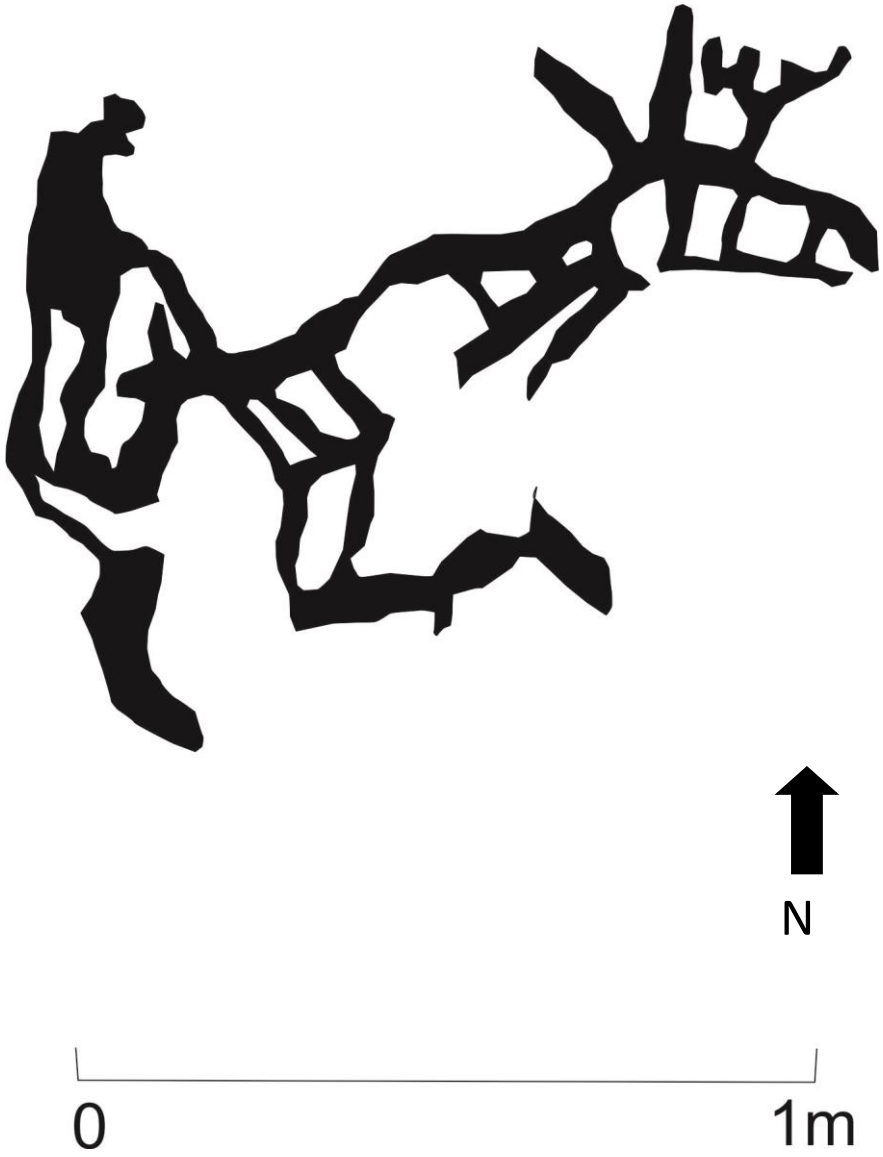
Appendix 19 Little Meg cist stones.



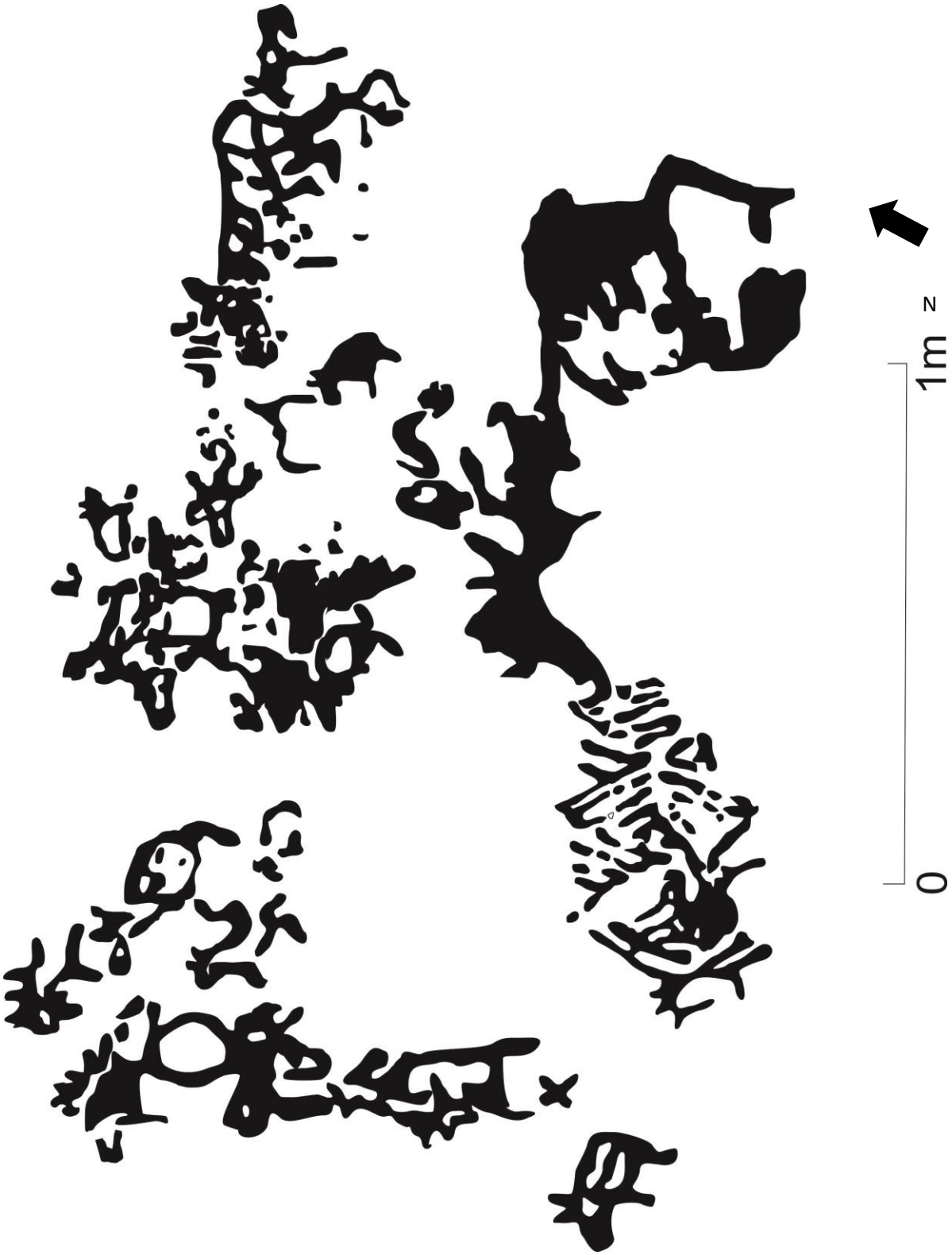
Appendix 20 Gillalees.



Appendix 21. Beckstones.

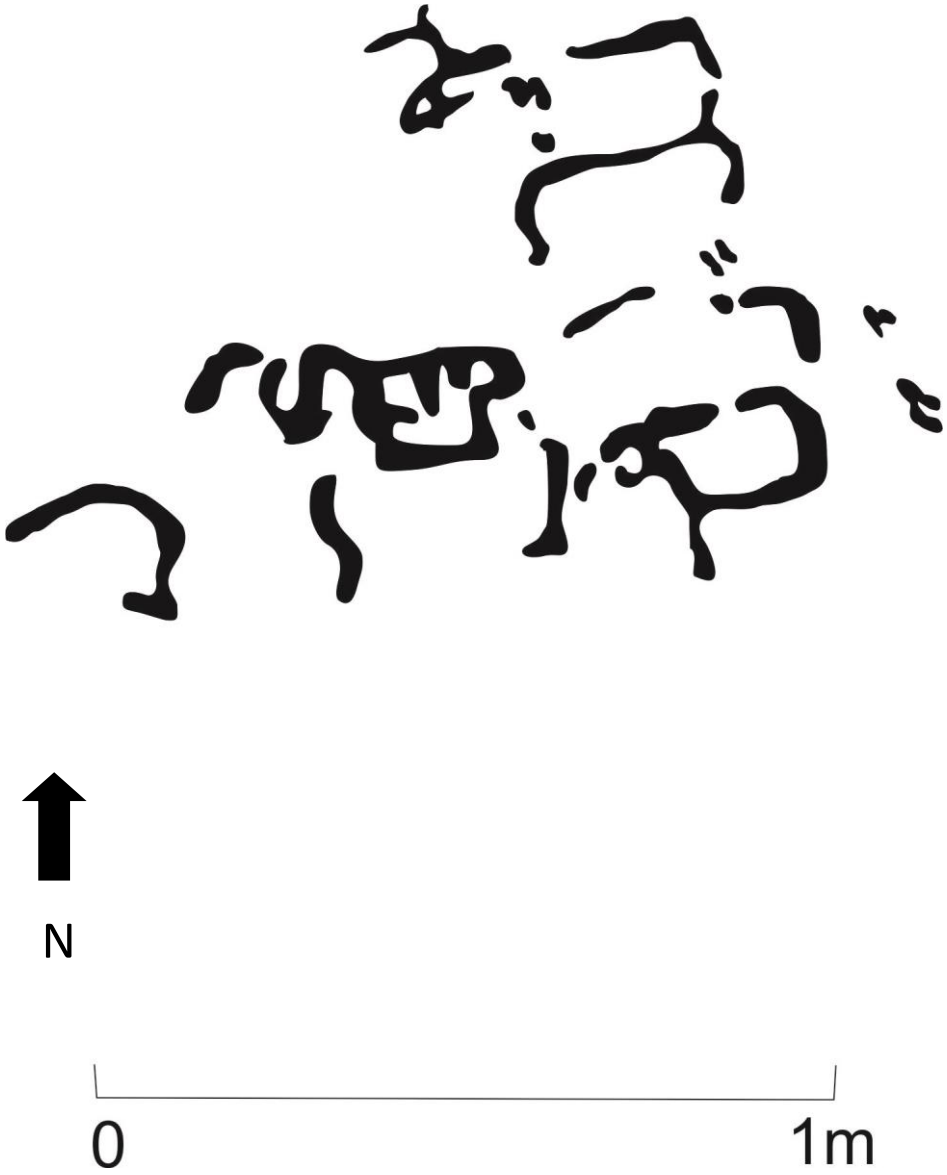


Appendix 22. Åbosjön B.

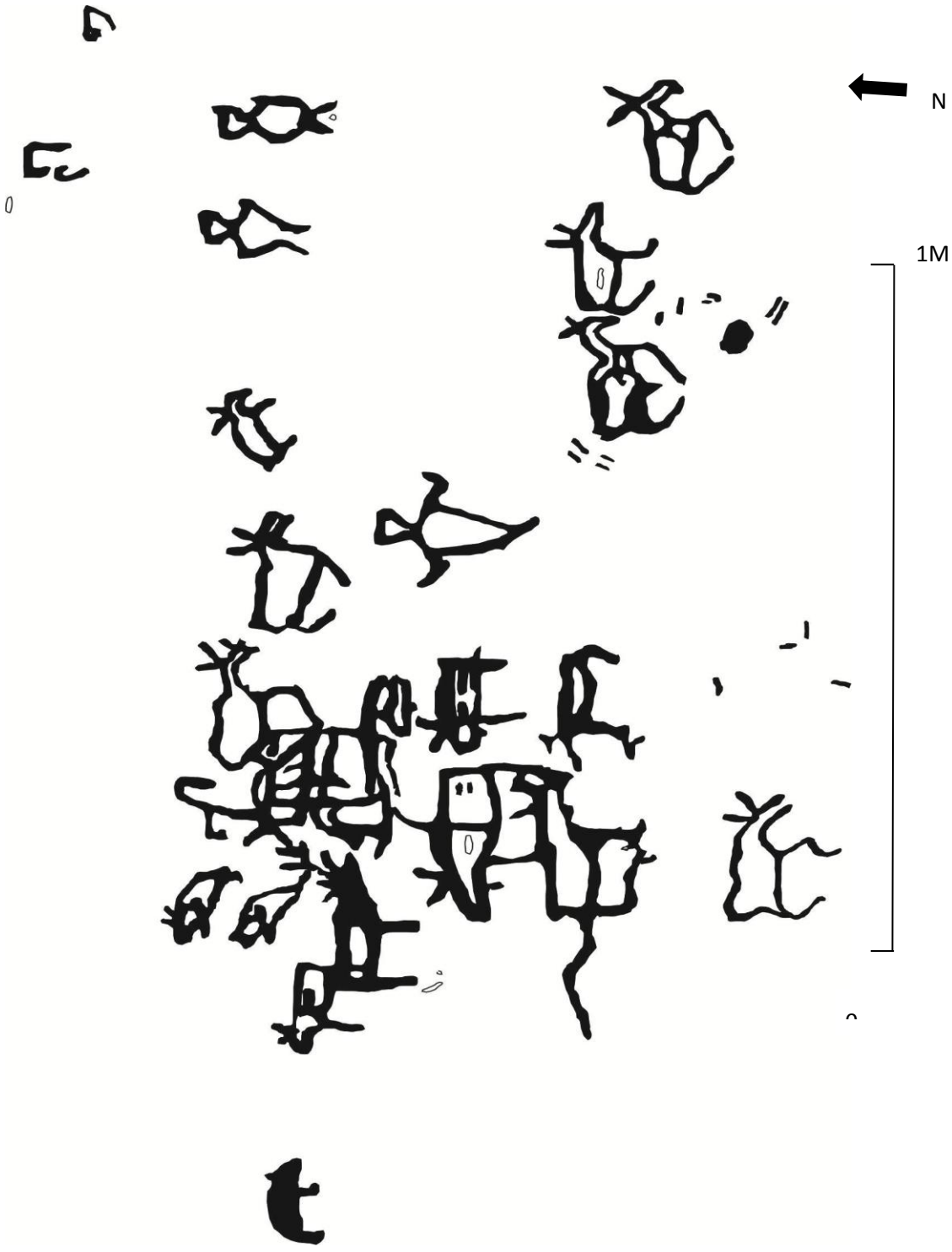


Appendix 23. Fångsjön A:1.

Appendix 24. Fångsjön A:2.



Appendix 25. Fångsjön A:3.

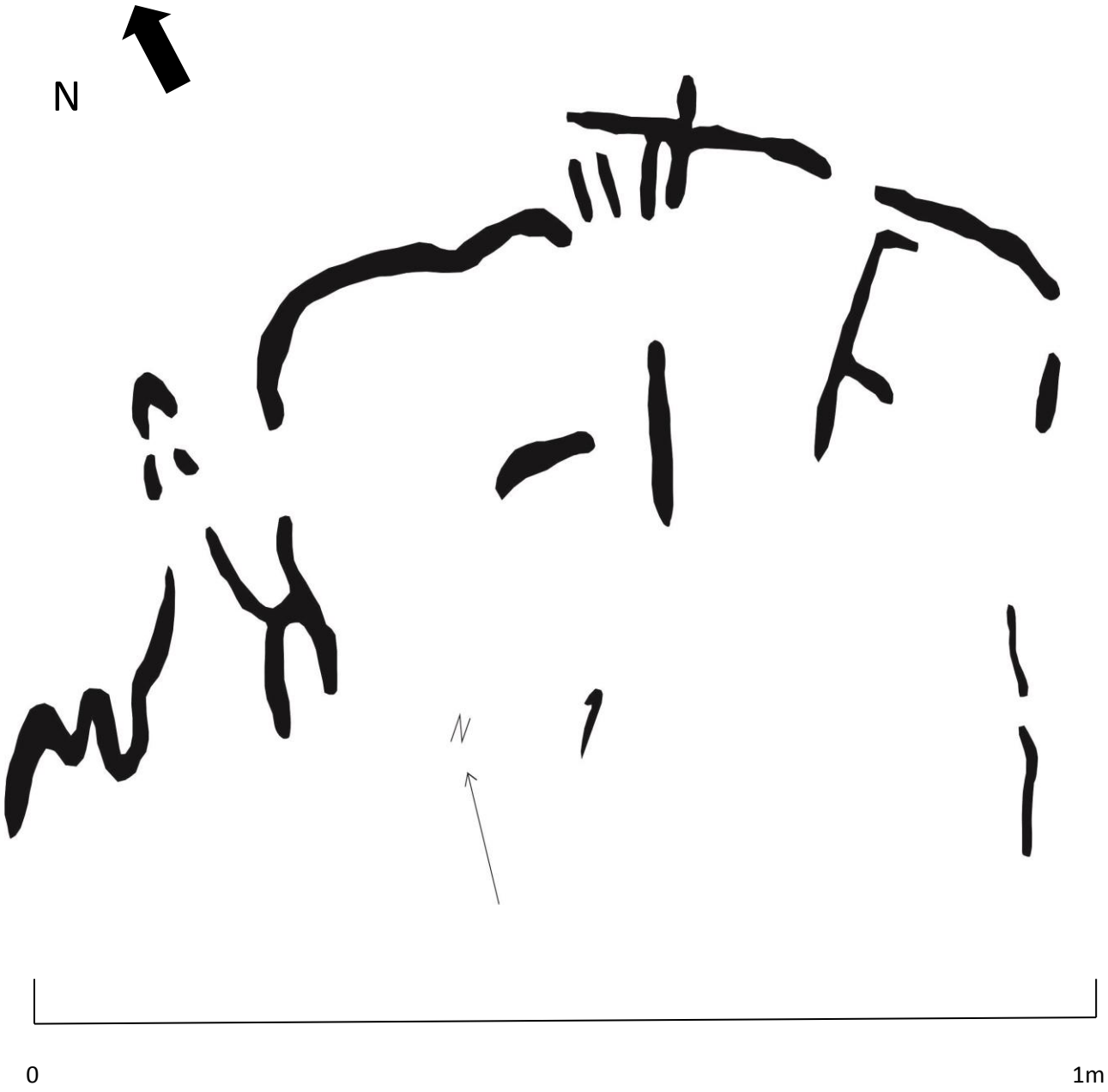

N
1M
0

Appendix 26. Flatruet A.

Appendix 27. Flatruet B.

Appendix 28. Landverk A.

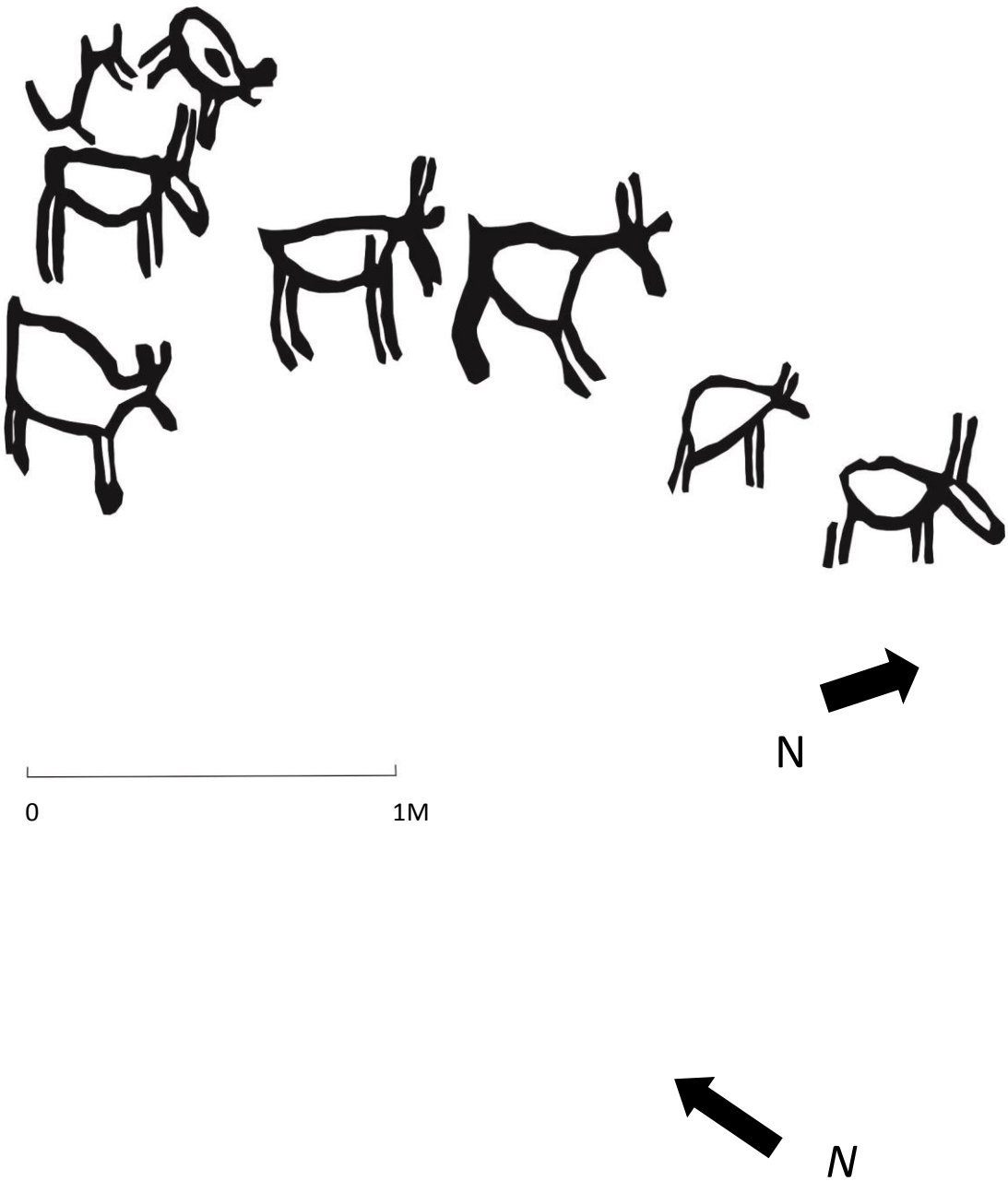
Appendix 29. Hålbergsudden B:1.



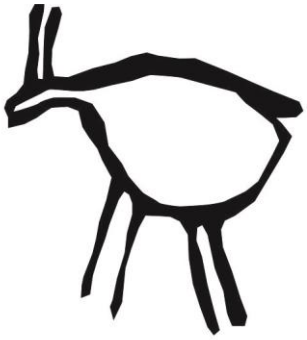
Appendix 30. Hålbergsudden B:2.

N
2M
0

Appendix 31. Gärde B.

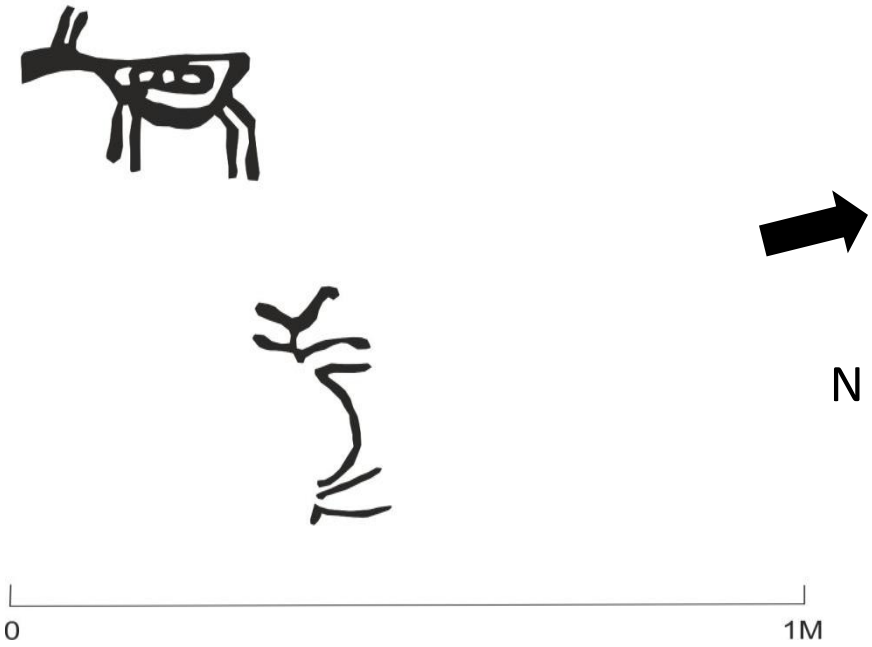


Appendix 32. Glösa 3.



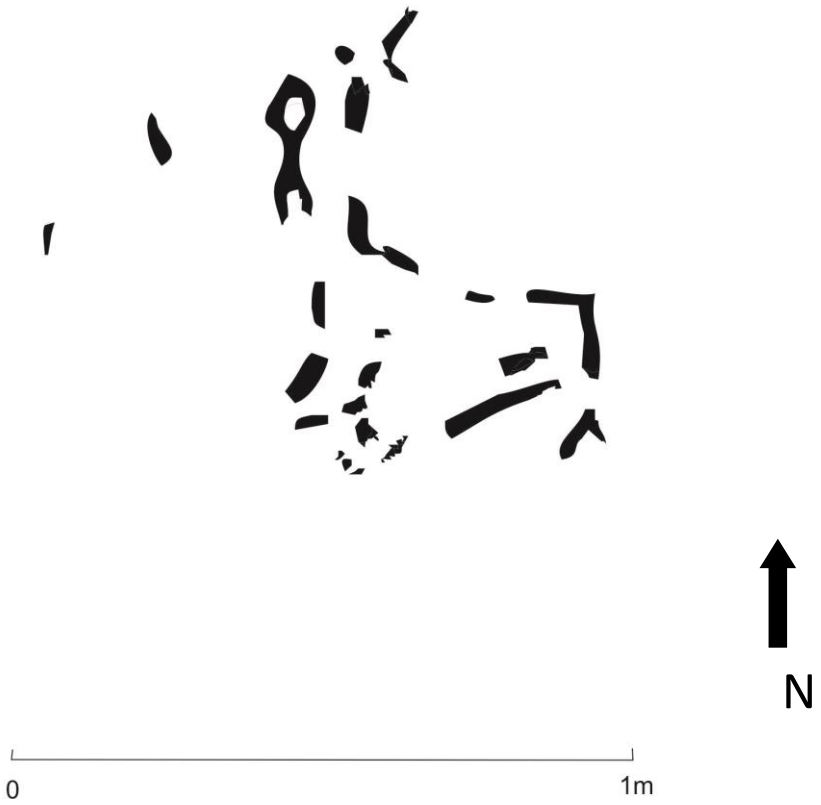
N

Appendix 33.Glösa 5.

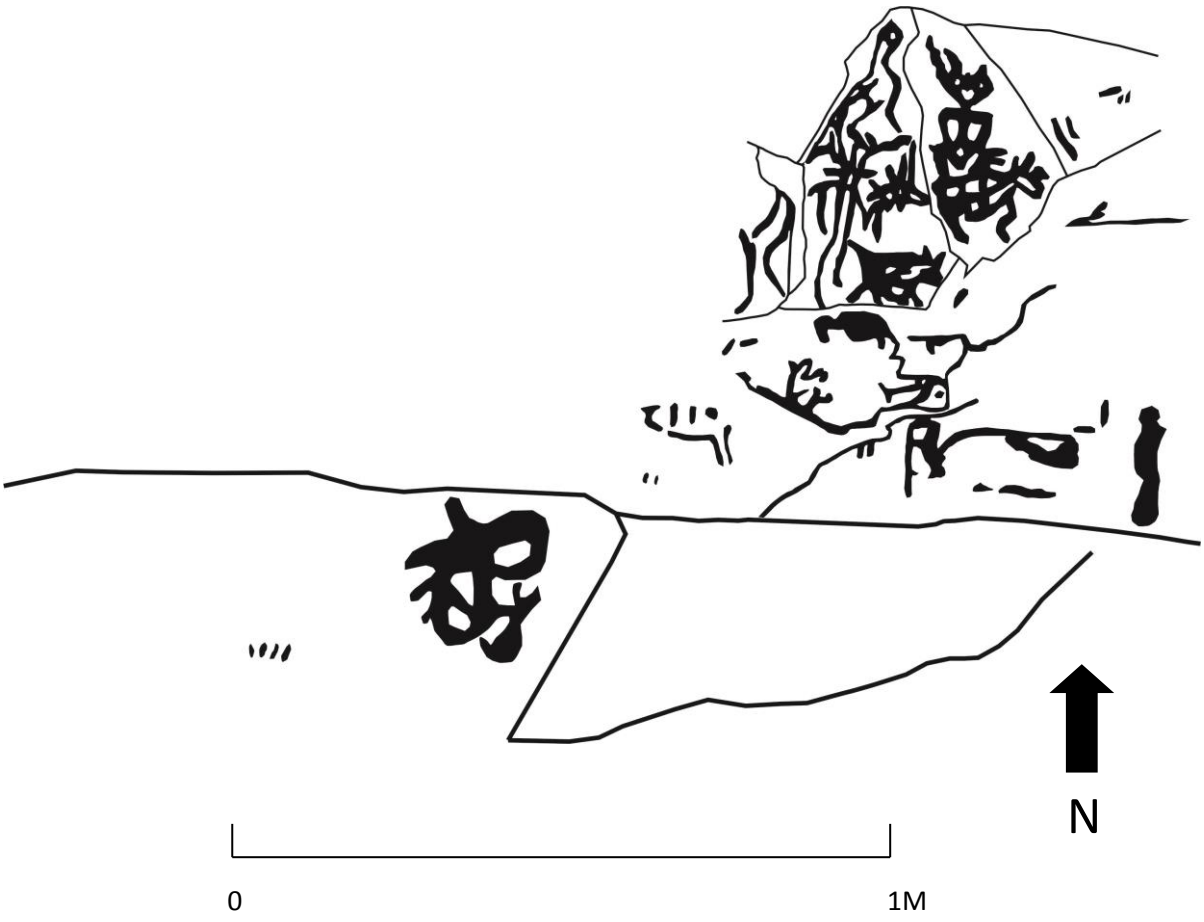


Appendix 34. Glösa 4.

Appendix 35. Glösa 1.



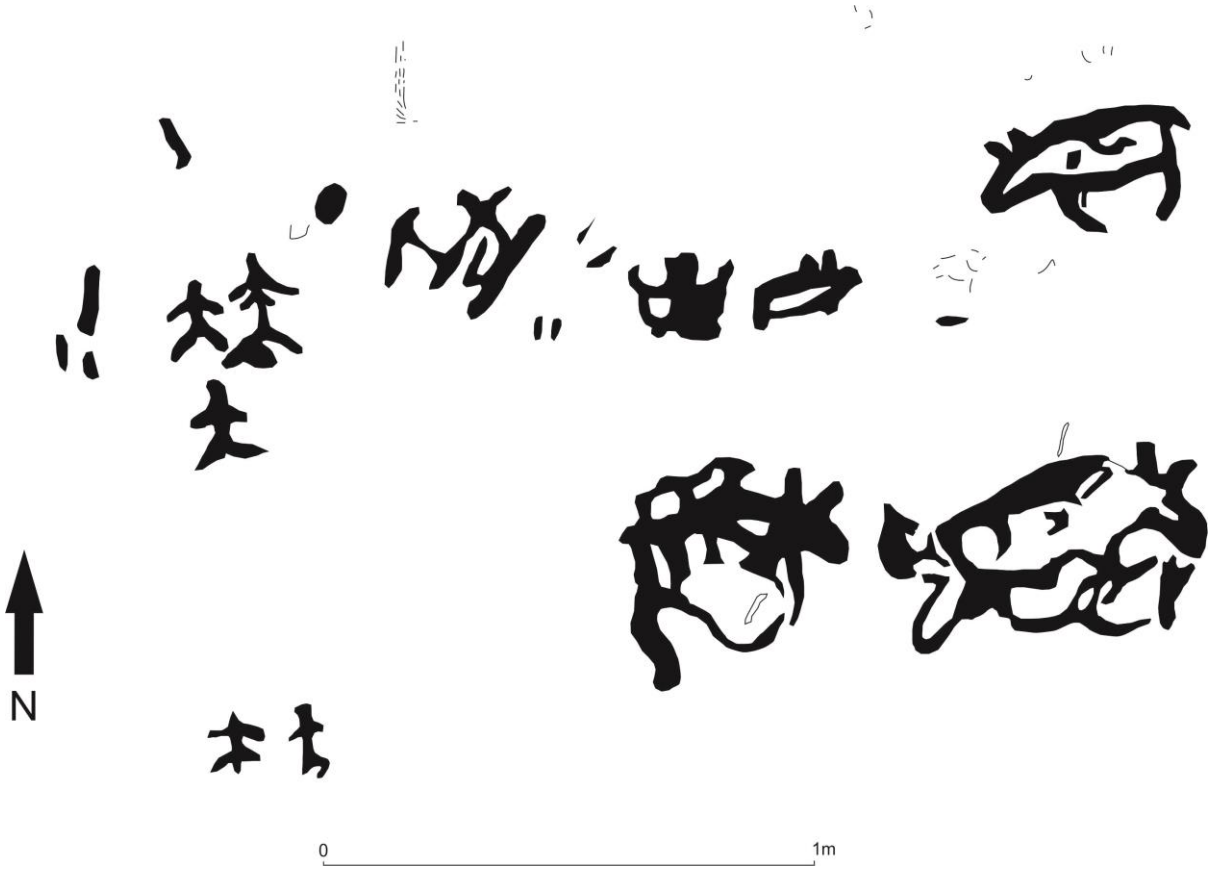
Appendix 36. Hästskotjärn A.



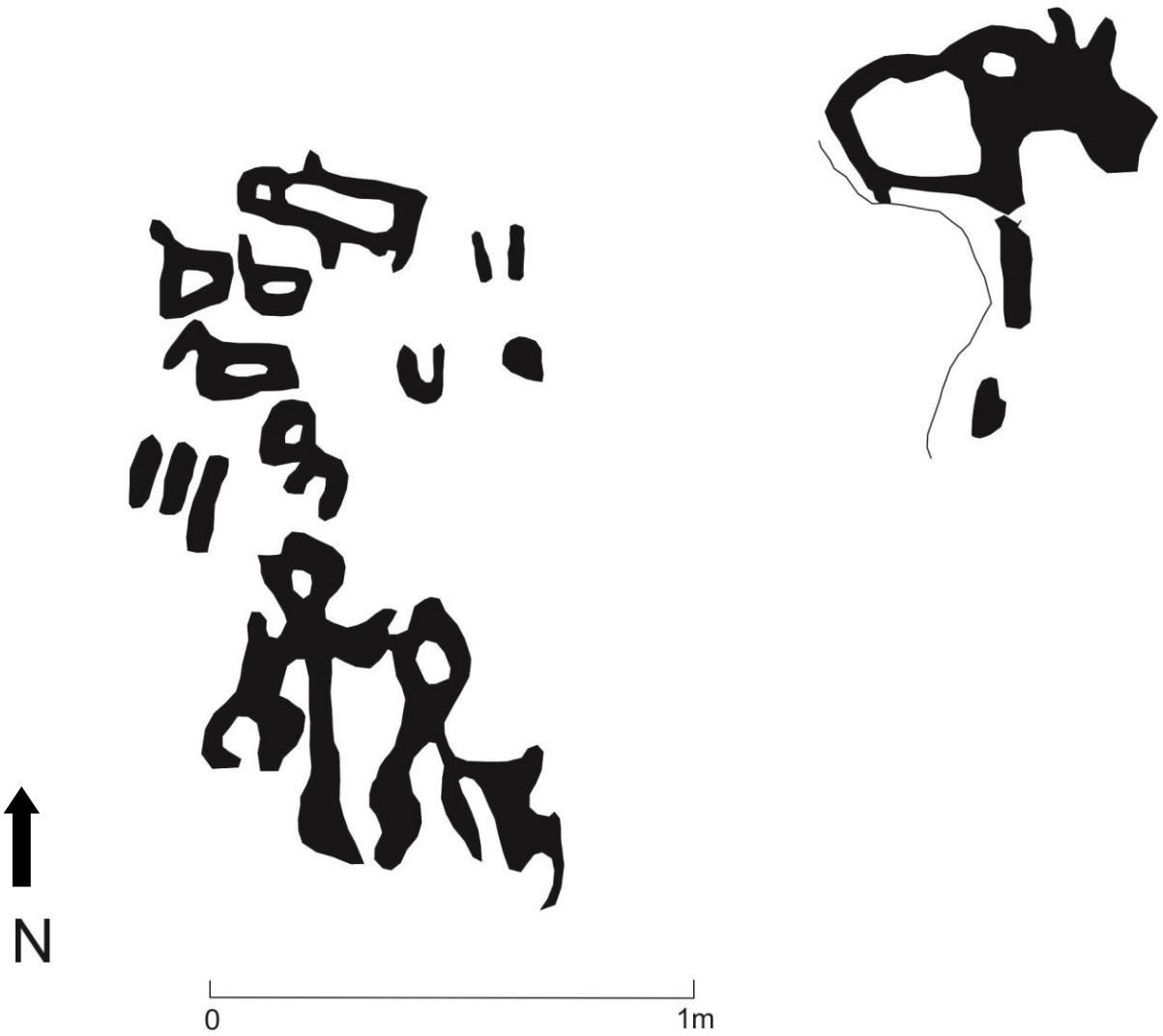
Appendix 37. Hästskotjärn C.

Appendix 38. Hästskotjärn D.

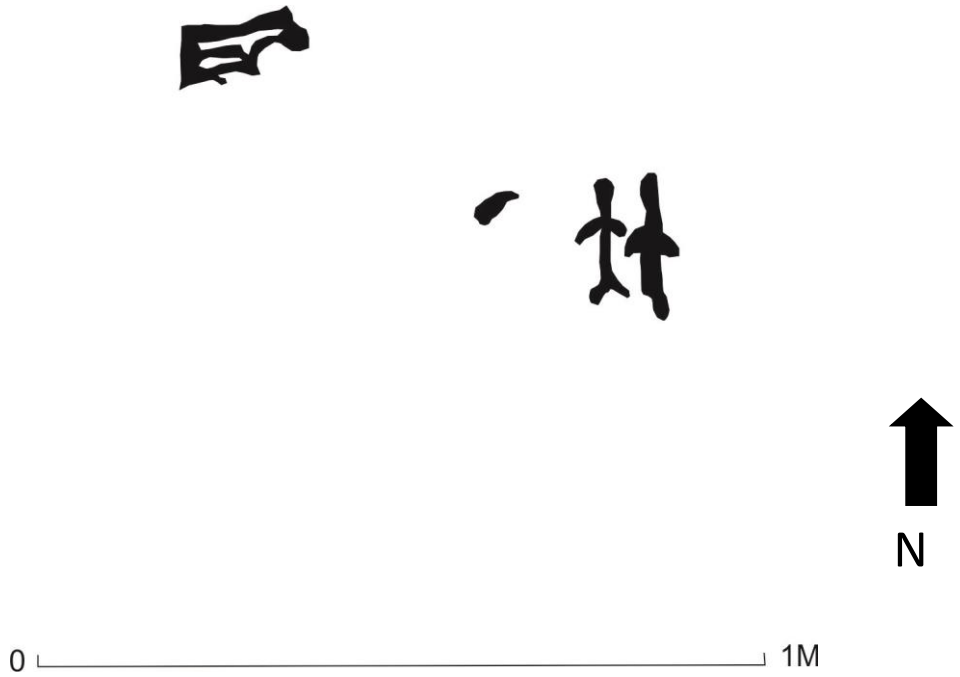
Appendix 39. Särvjö.



Appendix 40. Skärvången B:2.



Appendix 41. Skärvången A.



Appendix 42. Skärvången B:1.